Lampiran 1. *Source code* SIAKAD Universitas

Source code 1 DDL SIAKAD Universitas

```
1    create table m_fakultas
2    (
3    id_fakultas varchar(3),
4    content varchar(45) not null,
5    constraint pk_m_fakultas primary key(id_fakultas)
6    )
7
8    create table m_jenjang
9    (
10   id_jenjang varchar(3),
11   content varchar(45) not null,
12   constraint pk_m_jenjang primary key (id_jenjang)
13   )
14
15   create table m_jurusan
16   (
17   id_jurusan varchar(3),
18   id_fakultas varchar(3),
19   id_jenjang varchar(3),
20   content varchar(45) not null,
21   constraint fk_m_fakultas foreign key (id_fakultas) references m_fakultas(id_fakultas),
22   constraint fk_m_jenjang foreign key (id_jenjang) references m_jenjang(id_jenjang),
23   constraint pk_m_jurusan primary key (id_jurusan, id_fakultas, id_jenjang)
24   )
25
26   create table m_prog_studi
27   (
28   id_prog_studi varchar(3),
29   id_jurusan varchar(3),
30   id_fakultas varchar(3),
31   id_jenjang varchar(3),
32   content varchar(45) not null,
33   constraint fk_m_jurusan foreign key (id_jurusan, id_fakultas, id_jenjang) references m_jurusan(id_jurusan, id_fakultas, id_jenjang),
34   constraint pk_m_prog_studi primary key (id_prog_studi, id_jurusan, id_fakultas, id_jenjang)
35   )
36
37   create table mahasiswa
38   (
39   nim varchar(15),
40   id_prog_studi varchar(3),
41   id_jurusan varchar(3),
42   id_fakultas varchar(3),
43   id_jenjang varchar(3),
44   nama varchar(45) not null,
45   angkatan int not null,
46   constraint fk_m_prog_studi foreign key (id_prog_studi, id_jurusan, id_fakultas, id_jenjang) references m_prog_studi(id_prog_studi,
47   id_jurusan, id_fakultas, id_jenjang),
48   constraint pk_mahasiswa primary key (nim)
49   )
50
51   create table mata_kuliah
52   (
53   id_mata_kuliah varchar(10),
54   id_fakultas varchar(3),
55   id_jenjang varchar(3),
56   id_jurusan varchar(3),
57   id_prog_studi varchar(3),
58   k_mk varchar(10),
59   thn_mk int,
60   nama varchar(45) not null,
61   sks int not null,
62   constraint uk_m_prog_studi2 unique (id_prog_studi, id_jurusan, id_fakultas, id_jenjang, k_mk, thn_mk),
63   constraint pk_mata_kuliah primary key (id_mata_kuliah),
64   constraint fk_m_prog_studi2 foreign key (id_prog_studi, id_jurusan, id_fakultas, id_jenjang) references
65   m_prog_studi(id_prog_studi, id_jurusan, id_fakultas, id_jenjang)
66   )
67
68   create table m_nilai
69   (
70   id_nilai varchar(2),
71   min_ int not null,
72   max_ int not null,
73   na int not null,
74   constraint pk_nilai primary key(id_nilai)
75   )
76
```

```
77   create table khs
78   (
79   nim varchar(15),
80   id_mata_kuliah varchar(10),
81   is_ganjil bit,
82   is_genap bit,
83   thn_akademik int not null,
84   id_nilai varchar(2),
85   constraint fk_m_nilai foreign key (id_nilai) references m_nilai(id_nilai),
86   constraint fk_m_mata_kuliah foreign key (id_mata_kuliah) references mata_kuliah(id_mata_kuliah),
87   constraint fk_mahasiswa foreign key (nim) references mahasiswa(nim),
88   )
```

Lampiran 2. *Source code* Implementasi secara konvensional

Source code 2 *Query* 1 secara konvensional

```
1    drop table mahasiswa
2    drop table khs
3    drop table mata_kuliah
4    drop table m_nilai
5
6    SELECT * into mahasiswa FROM [SITUS1].[SIAKAD].[dbo].[mahasiswa]
7    union all
8    SELECT * FROM [SITUS2].[SIAKAD].[dbo].[mahasiswa]
9    union all
10   SELECT * FROM [SITUS3].[SIAKAD].[dbo].[mahasiswa]
11   union all
12   SELECT * FROM [SITUS4].[SIAKAD].[dbo].[mahasiswa]
13   union all
14   SELECT * FROM [SITUS5].[SIAKAD].[dbo].[mahasiswa]
15
16   SELECT * into khs FROM [SITUS1].[SIAKAD].[dbo].[khs]
17   union all
18   SELECT * FROM [SITUS2].[SIAKAD].[dbo].[khs]
19   union all
20   SELECT * FROM [SITUS3].[SIAKAD].[dbo].[khs]
21   union all
22   SELECT * FROM [SITUS4].[SIAKAD].[dbo].[khs]
23   union all
24   SELECT * FROM [SITUS5].[SIAKAD].[dbo].[khs]
25
26   SELECT * into mata_kuliah FROM [SITUS1].[SIAKAD].[dbo].[mata_kuliah]
27   union all
28   SELECT * FROM [SITUS2].[SIAKAD].[dbo].[mata_kuliah]
29   union all
30   SELECT * FROM [SITUS3].[SIAKAD].[dbo].[mata_kuliah]
31   union all
32   SELECT * FROM [SITUS4].[SIAKAD].[dbo].[mata_kuliah]
33   union all
34   SELECT * FROM [SITUS5].[SIAKAD].[dbo].[mata_kuliah]
35
36   SELECT * into m_nilai FROM [SITUS1].[SIAKAD].[dbo].[m_nilai]
37
38   select      khs.nim, mahasiswa.nama, round((sum(m_nilai.na * mata_kuliah.sks)/ sum(mata_kuliah.sks)),2) as ipk
39   from        mahasiswa, khs, mata_kuliah, m_nilai
40   where       khs.nim = mahasiswa.nim AND
41              khs.id_mata_kuliah = mata_kuliah.id_mata_kuliah AND
42              khs.id_nilai = m_nilai.id_nilai
43   group by khs.nim, mahasiswa.nama
44   having round((sum(m_nilai.na * mata_kuliah.sks)/ sum(mata_kuliah.sks)),2) = 4
```

Source code 3 *Query* 2 secara konvensional

```
1    drop table mahasiswa
2    drop table jenjang
3    drop table fakultas
4    drop table jurusan
5    drop table prodi
6
7    SELECT * INTO jenjang FROM [SITUS1].[SIAKAD].[dbo].[m_jenjang]
8
9    SELECT * into fakultas FROM [SITUS1].[SIAKAD].[dbo].[m_fakultas]
10   UNION ALL
11   SELECT * FROM [SITUS2].[SIAKAD].[dbo].[m_fakultas]
12   UNION ALL
13   SELECT * FROM [SITUS3].[SIAKAD].[dbo].[m_fakultas]
14   UNION ALL
15   SELECT * FROM [SITUS4].[SIAKAD].[dbo].[m_fakultas]
16   UNION ALL
17   SELECT * FROM [SITUS5].[SIAKAD].[dbo].[m_fakultas]
18
19   SELECT * into prodi FROM [SITUS1].[SIAKAD].[dbo].[m_prog_studi]
20   UNION ALL
21   SELECT * FROM [SITUS2].[SIAKAD].[dbo].[m_prog_studi]
22   UNION ALL
23   SELECT * FROM [SITUS3].[SIAKAD].[dbo].[m_prog_studi]
24   UNION ALL
25   SELECT * FROM [SITUS4].[SIAKAD].[dbo].[m_prog_studi]
26   UNION ALL
27   SELECT * FROM [SITUS5].[SIAKAD].[dbo].[m_prog_studi]
28
```

```
29   SELECT * into jurusan FROM [SITUS1].[SIAKAD].[dbo].[m_jurusan]
30   UNION ALL
31   SELECT * FROM [SITUS2].[SIAKAD].[dbo].[m_jurusan]
32   UNION ALL
33   SELECT * FROM [SITUS3].[SIAKAD].[dbo].[m_jurusan]
34   UNION ALL
35   SELECT * FROM [SITUS4].[SIAKAD].[dbo].[m_jurusan]
36   UNION ALL
37   SELECT * FROM [SITUS5].[SIAKAD].[dbo].[m_jurusan]
38
39   SELECT * into mahasiswa FROM [SITUS1].[SIAKAD].[dbo].[mahasiswa]
40   UNION ALL
41   SELECT * FROM [SITUS2].[SIAKAD].[dbo].[mahasiswa]
42   UNION ALL
43   SELECT * FROM [SITUS3].[SIAKAD].[dbo].[mahasiswa]
44   UNION ALL
45   SELECT * FROM [SITUS4].[SIAKAD].[dbo].[mahasiswa]
46   UNION ALL
47   SELECT * FROM [SITUS5].[SIAKAD].[dbo].[mahasiswa]
48
49   SELECT    distinct mahasiswa.nim,
50             mahasiswa.nama,
51             jenjang.content as jenjang,
52             fakultas.content as fakultas,
53             jurusan.content as jurusan,
54             prodi.content as program_studi
55   FROM      mahasiswa,
56             jenjang,
57             fakultas,
58             jurusan,
59             prodi
60   WHERE     jenjang.id_jenjang = prodi.id_jenjang AND
61             jenjang.id_jenjang = mahasiswa.id_jenjang AND
62             fakultas.id_fakultas = jurusan.id_fakultas AND
63             fakultas.id_fakultas = prodi.id_fakultas AND
64             fakultas.id_fakultas = mahasiswa.id_fakultas AND
65             prodi.id_prog_studi = mahasiswa.id_prog_studi AND
66             prodi.id_jenjang = mahasiswa.id_jenjang AND
67             prodi.id_fakultas = mahasiswa.id_fakultas AND
68             prodi.id_jurusan = mahasiswa.id_jurusan AND
69             jurusan.id_jurusan = mahasiswa.id_jurusan AND
70             mahasiswa.angkatan = '2009'
```

Source code 4 *Query* 3 secara konvensional

```
1    drop table prodi
2    drop table mahasiswa
3    drop table khs
4    drop table mata_kuliah
5
6    SELECT * into mahasiswa FROM [SITUS1].[SIAKAD].[dbo].[mahasiswa]
7    union all
8    SELECT * FROM [SITUS2].[SIAKAD].[dbo].[mahasiswa]
9    union all
10   SELECT * FROM [SITUS3].[SIAKAD].[dbo].[mahasiswa]
11   union all
12   SELECT * FROM [SITUS4].[SIAKAD].[dbo].[mahasiswa]
13   union all
14   SELECT * FROM [SITUS5].[SIAKAD].[dbo].[mahasiswa]
15
16   SELECT * into khs FROM [SITUS1].[SIAKAD].[dbo].[khs]
17   union all
18   SELECT * FROM [SITUS2].[SIAKAD].[dbo].[khs]
19   union all
20   SELECT * FROM [SITUS3].[SIAKAD].[dbo].[khs]
21   union all
22   SELECT * FROM [SITUS4].[SIAKAD].[dbo].[khs]
23   union all
24   SELECT * FROM [SITUS5].[SIAKAD].[dbo].[khs]
25
26   SELECT * into mata_kuliah FROM [SITUS1].[SIAKAD].[dbo].[mata_kuliah]
27   union all
28   SELECT * FROM [SITUS2].[SIAKAD].[dbo].[mata_kuliah]
29   union all
30   SELECT * FROM [SITUS3].[SIAKAD].[dbo].[mata_kuliah]
31   union all
32   SELECT * FROM [SITUS4].[SIAKAD].[dbo].[mata_kuliah]
33   union all
34   SELECT * FROM [SITUS5].[SIAKAD].[dbo].[mata_kuliah]
35
36   SELECT * into prodi FROM [SITUS1].[SIAKAD].[dbo].[m_prog_studi]
```

```
37   union all
38   SELECT * FROM [SITUS2].[SIAKAD].[dbo].[m_prog_studi]
39   union all
40   SELECT * FROM [SITUS3].[SIAKAD].[dbo].[m_prog_studi]
41   union all
42   SELECT * FROM [SITUS4].[SIAKAD].[dbo].[m_prog_studi]
43   union all
44   SELECT * FROM [SITUS5].[SIAKAD].[dbo].[m_prog_studi]
45
46   SELECT     mahasiswa.nim,
47                    mahasiswa.nama,
48                    mahasiswa.angkatan,
49                    mata_kuliah.nama as nama_mata_kuliah,
50                    khs.id_nilai as nilai
51   FROM       mata_kuliah, khs, mahasiswa, prodi
52   WHERE      mata_kuliah.id_prog_studi = prodi.id_prog_studi AND
53                    mata_kuliah.id_fakultas = prodi.id_fakultas AND
54                    mata_kuliah.id_jurusan = prodi.id_jurusan AND
55                    mata_kuliah.id_jenjang = prodi.id_jenjang AND
56                    mata_kuliah.id_prog_studi = mahasiswa.id_prog_studi AND
57                    mata_kuliah.id_fakultas = mahasiswa.id_fakultas AND
58                    mata_kuliah.id_jurusan = mahasiswa.id_jurusan AND
59                    mata_kuliah.id_jenjang = mahasiswa.id_jenjang AND
60                    mahasiswa.id_prog_studi = prodi.id_prog_studi AND
61                    mahasiswa.id_fakultas = prodi.id_fakultas AND
62                    mahasiswa.id_jurusan = prodi.id_jurusan AND
63                    mahasiswa.id_jenjang = prodi.id_jenjang AND
64                    mata_kuliah.id_mata_kuliah = khs.id_mata_kuliah AND
65                    khs.nim = mahasiswa.nim AND
66                    mata_kuliah.nama = 'Skripsi'
```
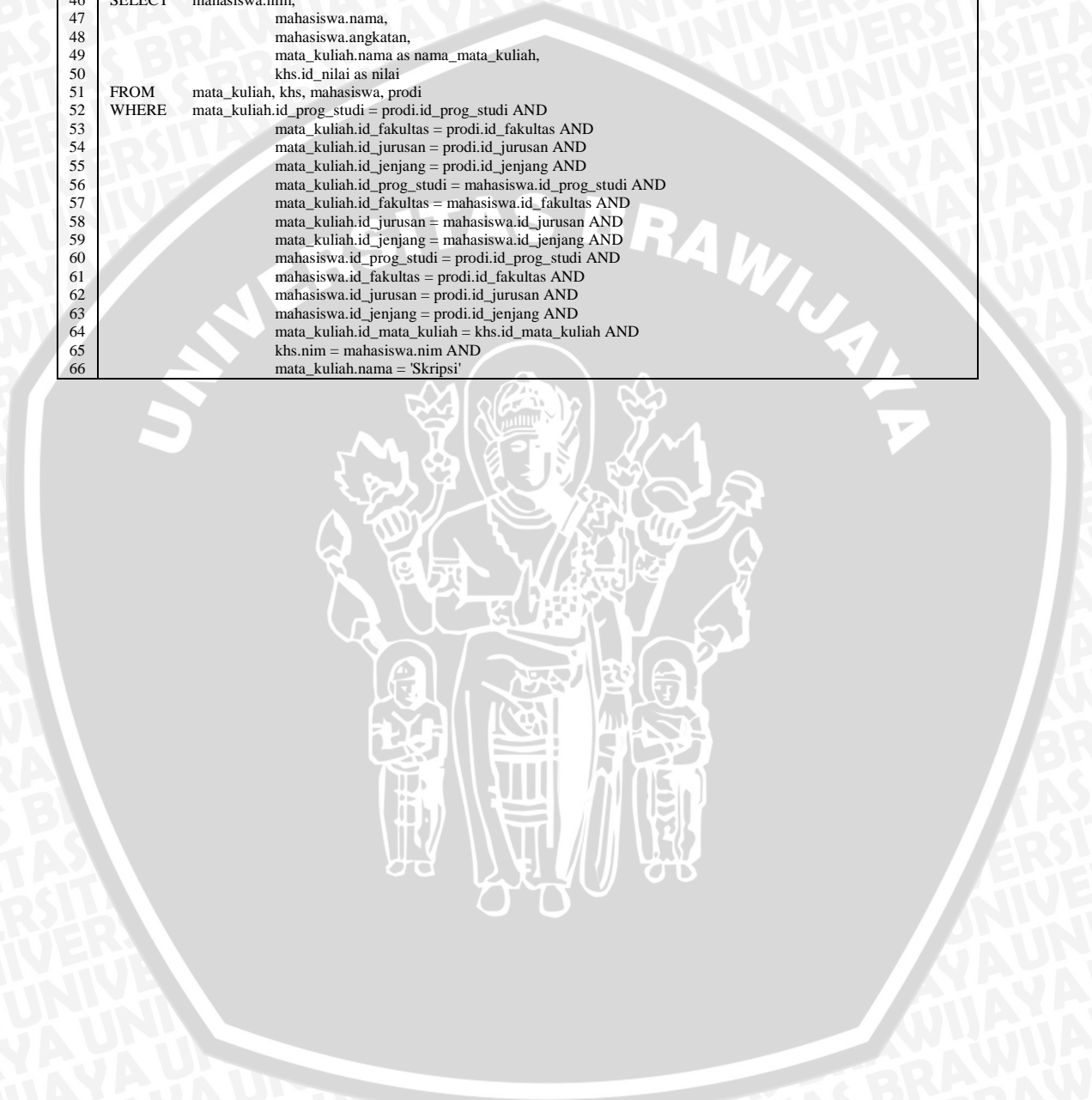
Lampiran 3. *Source code* implementasi menggunakan metode *Dynamic Approach*

Source code 5. *Query* 1 menggunakan metode *Dynamic Approach* pada situs Laporan

```
1     drop table temp111
2     drop table temp112
3     drop table temp113
4     drop table temp121
5     drop table temp122
6     drop table temp123
7     drop table temp131
8     drop table temp132
9     drop table temp133
10    drop table temp141
11    drop table temp142
12    drop table temp143
13    drop table temp151
14    drop table temp152
15    drop table temp153
16
17    SELECT [nim]
18       ,[id_mata_kuliah]
19       ,[na]
20        into temp111
21    from      [SITUS1].[SIAKAD].[dbo].[khs] as khs1,[SITUS1].[SIAKAD].[dbo].[m_nilai] as nilai1
22    where   khs1.id_nilai = nilai1.id_nilai
23
24    SELECT    temp111.nim,
25                    round((sum(temp111.na * mata_kuliah1.sks)/ sum(mata_kuliah1.sks)),2) as ipk
26                    into temp112
27    FROM      temp111, [SITUS1].[SIAKAD].[dbo].[mata_kuliah] as mata_kuliah1
28    WHERE     temp111.id_mata_kuliah = mata_kuliah1.id_mata_kuliah
29    group by temp111.nim
30    having round((sum(temp111.na * mata_kuliah1.sks)/ sum(mata_kuliah1.sks)),2) = 4
31
32    SELECT    mahasiswa1.nim,
33                    mahasiswa1.nama,
34                    temp112.ipk
35                    into temp113
36    FROM      temp112, [SITUS1].[SIAKAD].[dbo].[mahasiswa] as mahasiswa1
37    WHERE     temp112.nim = mahasiswa1.nim
38    --------------------------------------------------------------------------------
39    SELECT [nim]
40       ,[id_mata_kuliah]
41       ,[na]
42        into temp121
43    from      [SITUS2].[SIAKAD].[dbo].[khs] as khs2,[SITUS2].[SIAKAD].[dbo].[m_nilai] as nilai2
44    where   khs2.id_nilai = nilai2.id_nilai
45
46    SELECT    temp121.nim,
47                    round((sum(temp121.na * mata_kuliah2.sks)/ sum(mata_kuliah2.sks)),2) as ipk
48                    into temp122
49    FROM      temp121, [SITUS2].[SIAKAD].[dbo].[mata_kuliah] as mata_kuliah2
50    WHERE     temp121.id_mata_kuliah = mata_kuliah2.id_mata_kuliah
51    group by temp121.nim
52    having round((sum(temp121.na * mata_kuliah2.sks)/ sum(mata_kuliah2.sks)),2) = 4
53
54    SELECT    mahasiswa2.nim,
55                    mahasiswa2.nama,
56                    temp122.ipk
57                    into temp123
58    FROM      temp122, [SITUS2].[SIAKAD].[dbo].[mahasiswa] as mahasiswa2
59    WHERE     temp122.nim = mahasiswa2.nim
60    --------------------------------------------------------------------------------
61    SELECT [nim]
62       ,[id_mata_kuliah]
63       ,[na]
64        into temp131
65    from      [SITUS3].[SIAKAD].[dbo].[khs] as khs3,[SITUS3].[SIAKAD].[dbo].[m_nilai] as nilai3
66    where   khs3.id_nilai = nilai3.id_nilai
67
68    SELECT    temp131.nim,
69                    round((sum(temp131.na * mata_kuliah3.sks)/ sum(mata_kuliah3.sks)),2) as ipk
70                    into temp132
71    FROM      temp131, [SITUS3].[SIAKAD].[dbo].[mata_kuliah] as mata_kuliah3
72    WHERE     temp131.id_mata_kuliah = mata_kuliah3.id_mata_kuliah
73    group by temp131.nim
74    having round((sum(temp131.na * mata_kuliah3.sks)/ sum(mata_kuliah3.sks)),2) = 4
```

```
75
76   SELECT    mahasiswa3.nim,
78                      mahasiswa3.nama,
79                      temp132.ipk
80                      into temp133
81   FROM      temp132, [SITUS3].[SIAKAD].[dbo].[mahasiswa] as mahasiswa3
82   WHERE     temp132.nim = mahasiswa3.nim
83   -----------------------------------------------------------------------------------
84   SELECT [nim]
85       ,[id_mata_kuliah]
86       ,[na]
87       into temp141
88   from        [SITUS4].[SIAKAD].[dbo].[khs] as khs4,[SITUS4].[SIAKAD].[dbo].[m_nilai] as nilai4
89   where   khs4.id_nilai = nilai4.id_nilai
90
91   SELECT    temp141.nim,
92                      round((sum(temp141.na * mata_kuliah4.sks)/ sum(mata_kuliah4.sks)),2) as ipk
93                      into temp142
94   FROM      temp141, [SITUS4].[SIAKAD].[dbo].[mata_kuliah] as mata_kuliah4
95   WHERE     temp141.id_mata_kuliah = mata_kuliah4.id_mata_kuliah
96   group by temp141.nim
97   having round((sum(temp141.na * mata_kuliah4.sks)/ sum(mata_kuliah4.sks)),2) = 4
98
99   SELECT    mahasiswa4.nim,
100                     mahasiswa4.nama,
101                     temp142.ipk
102                     into temp143
103  FROM      temp142, [SITUS4].[SIAKAD].[dbo].[mahasiswa] as mahasiswa4
104  WHERE     temp142.nim = mahasiswa4.nim
105  -----------------------------------------------------------------------------------
106  SELECT [nim]
107      ,[id_mata_kuliah]
108      ,[na]
109      into temp151
110  from        [SITUS5].[SIAKAD].[dbo].[khs] as khs5,[SITUS5].[SIAKAD].[dbo].[m_nilai] as nilai5
111  where   khs5.id_nilai = nilai5.id_nilai
112
113  SELECT    temp151.nim,
114                     round((sum(temp151.na * mata_kuliah5.sks)/ sum(mata_kuliah5.sks)),3) as ipk
115                     into temp152
116  FROM      temp151, [SITUS5].[SIAKAD].[dbo].[mata_kuliah] as mata_kuliah5
117  WHERE     temp151.id_mata_kuliah = mata_kuliah5.id_mata_kuliah
118  group by temp151.nim
119  having round((sum(temp151.na * mata_kuliah5.sks)/ sum(mata_kuliah5.sks)),3) = 4
120
121  SELECT    mahasiswa5.nim,
122                     mahasiswa5.nama,
123                     temp152.ipk
124                     into temp153
125  FROM      temp152, [SITUS5].[SIAKAD].[dbo].[mahasiswa] as mahasiswa5
126  WHERE     temp152.nim = mahasiswa5.nim
127  -----------------------------------------------------------------------------------
128  SELECT * FROM temp113
129  UNION ALL
130  SELECT * FROM temp123
131  UNION ALL
132  SELECT * FROM temp133
133  UNION ALL
134  SELECT * FROM temp143
135  UNION ALL
136  SELECT * FROM temp153
```

Source code 6. *Query* 1 menggunakan metode *Dynamic Approach* pada situs 1

```
1    drop table temp111
2    drop table temp112
3    drop table temp113
4    drop table temp121
5    drop table temp122
6    drop table temp123
7    drop table temp131
8    drop table temp132
9    drop table temp133
10   drop table temp141
11   drop table temp142
12   drop table temp143
13   drop table temp151
14   drop table temp152
15   drop table temp153
16
17   SELECT [nim]
```

```
18              ,[id_mata_kuliah]
19              ,[na]
20          into temp111
21      from        [dbo].[khs] as khs1,[dbo].[m_nilai] as nilai1
22      where   khs1.id_nilai = nilai1.id_nilai
23
24      SELECT      temp111.nim,
25                          round((sum(temp111.na * mata_kuliah1.sks)/ sum(mata_kuliah1.sks)),2) as ipk
26                          into temp112
27      FROM        temp111, [dbo].[mata_kuliah] as mata_kuliah1
28      WHERE       temp111.id_mata_kuliah = mata_kuliah1.id_mata_kuliah
29      group by temp111.nim
30      having round((sum(temp111.na * mata_kuliah1.sks)/ sum(mata_kuliah1.sks)),2) =4
31
32      SELECT      mahasiswa1.nim,
33                          mahasiswa1.nama,
34                          temp112.ipk
35                          into temp113
36      FROM        temp112, [dbo].[mahasiswa] as mahasiswa1
37      WHERE       temp112.nim = mahasiswa1.nim
38      ---------------------------------------------------------------------------
39      SELECT [nim]
40          ,[id_mata_kuliah]
41          ,[na]
42          into temp121
43      from        [SITUS2].[SIAKAD].[dbo].[khs] as khs2,[SITUS2].[SIAKAD].[dbo].[m_nilai] as nilai2
44      where   khs2.id_nilai = nilai2.id_nilai
45
46      SELECT      temp121.nim,
47                          round((sum(temp121.na * mata_kuliah2.sks)/ sum(mata_kuliah2.sks)),2) as ipk
48                          into temp122
49      FROM        temp121, [SITUS2].[SIAKAD].[dbo].[mata_kuliah] as mata_kuliah2
50      WHERE       temp121.id_mata_kuliah = mata_kuliah2.id_mata_kuliah
51      group by temp121.nim
52      having round((sum(temp121.na * mata_kuliah2.sks)/ sum(mata_kuliah2.sks)),2) =4
53
54      SELECT      mahasiswa2.nim,
55                          mahasiswa2.nama,
56                          temp122.ipk
57                          into temp123
58      FROM        temp122, [SITUS2].[SIAKAD].[dbo].[mahasiswa] as mahasiswa2
59      WHERE       temp122.nim = mahasiswa2.nim
60      ---------------------------------------------------------------------------
61      SELECT [nim]
62          ,[id_mata_kuliah]
63          ,[na]
64          into temp131
65      from        [SITUS3].[SIAKAD].[dbo].[khs] as khs3,[SITUS3].[SIAKAD].[dbo].[m_nilai] as nilai3
66      where   khs3.id_nilai = nilai3.id_nilai
67
68      SELECT      temp131.nim,
69                          round((sum(temp131.na * mata_kuliah3.sks)/ sum(mata_kuliah3.sks)),2) as ipk
70                          into temp132
71      FROM        temp131, [SITUS3].[SIAKAD].[dbo].[mata_kuliah] as mata_kuliah3
72      WHERE       temp131.id_mata_kuliah = mata_kuliah3.id_mata_kuliah
73      group by temp131.nim
74      having round((sum(temp131.na * mata_kuliah3.sks)/ sum(mata_kuliah3.sks)),2)=4
75
76      SELECT      mahasiswa3.nim,
78                          mahasiswa3.nama,
79                          temp132.ipk
80                          into temp133
81      FROM        temp132, [SITUS3].[SIAKAD].[dbo].[mahasiswa] as mahasiswa3
82      WHERE       temp132.nim = mahasiswa3.nim
83      ---------------------------------------------------------------------------
84      SELECT [nim]
85          ,[id_mata_kuliah]
86          ,[na]
87          into temp141
88      from        [SITUS4].[SIAKAD].[dbo].[khs] as khs4,[SITUS4].[SIAKAD].[dbo].[m_nilai] as nilai4
89      where   khs4.id_nilai = nilai4.id_nilai
90
91      SELECT      temp141.nim,
92                          round((sum(temp141.na * mata_kuliah4.sks)/ sum(mata_kuliah4.sks)),2) as ipk
93                          into temp142
94      FROM        temp141, [SITUS4].[SIAKAD].[dbo].[mata_kuliah] as mata_kuliah4
95      WHERE       temp141.id_mata_kuliah = mata_kuliah4.id_mata_kuliah
96      group by temp141.nim
97      having round((sum(temp141.na * mata_kuliah4.sks)/ sum(mata_kuliah4.sks)),2) =4
98
99      SELECT      mahasiswa4.nim,
```

```
100                        mahasiswa4.nama,
101                        temp142.ipk
102                        into temp143
103    FROM       temp142, [SITUS4].[SIAKAD].[dbo].[mahasiswa] as mahasiswa4
104    WHERE      temp142.nim = mahasiswa4.nim
105    ----------------------------------------------------------------------------
106    SELECT [nim]
107       ,[id_mata_kuliah]
108       ,[na]
109       into temp151
110    from       [SITUS5].[SIAKAD].[dbo].[khs] as khs5,[SITUS5].[SIAKAD].[dbo].[m_nilai] as nilai5
111    where   khs5.id_nilai = nilai5.id_nilai
112
113    SELECT     temp151.nim,
114                        round((sum(temp151.na * mata_kuliah5.sks)/ sum(mata_kuliah5.sks)),3) as ipk
115                        into temp152
116    FROM       temp151, [SITUS5].[SIAKAD].[dbo].[mata_kuliah] as mata_kuliah5
117    WHERE      temp151.id_mata_kuliah = mata_kuliah5.id_mata_kuliah
118    group by temp151.nim
119    having round((sum(temp151.na * mata_kuliah5.sks)/ sum(mata_kuliah5.sks)),3) =4
120
121    SELECT     mahasiswa5.nim,
122                        mahasiswa5.nama,
123                        temp152.ipk
124                        into temp153
125    FROM       temp152, [SITUS5].[SIAKAD].[dbo].[mahasiswa] as mahasiswa5
126    WHERE      temp152.nim = mahasiswa5.nim
127    ----------------------------------------------------------------------------
128    SELECT * FROM temp113
129    UNION ALL
130    SELECT * FROM temp123
131    UNION ALL
132    SELECT * FROM temp133
133    UNION ALL
134    SELECT * FROM temp143
135    UNION ALL
136    SELECT * FROM temp153
```

Source code 7. monorelasi *query* 2

```
1    SELECT     mahasiswa.id_fakultas,
2                      mahasiswa.id_jenjang,
3                      mahasiswa.id_jurusan,
4                      mahasiswa.id_prog_studi,
5                      mahasiswa.nama,
6                      mahasiswa.nim
7    INTO       mono2
8    FROM       mahasiswa
9    WHERE      mahasiswa.angkatan = '2009'
```

Source code 8. *Query* 2 menggunakan metode *Dynamic Approach* pada situs laporan

```
1     drop table temp211
2     drop table temp212
3     drop table temp213
4     drop table temp214
5     drop table temp221
6     drop table temp222
7     drop table temp223
8     drop table temp224
9     drop table temp231
10    drop table temp232
11    drop table temp233
12    drop table temp234
13    drop table temp241
14    drop table temp242
15    drop table temp243
16    drop table temp244
17    drop table temp251
18    drop table temp252
19    drop table temp253
20    drop table temp254
21    ----------------------------------------------------------------------------
22    SELECT     mahasiswa1.nim,
23                        mahasiswa1.nama,
24                        mahasiswa1.id_jenjang,
25                        mahasiswa1.id_fakultas,
26                        mahasiswa1.id_jurusan,
```

```
27              prodi1.content as program_studi
28              into temp211
29    FROM      [SITUS1].[SIAKAD].[dbo].[mono2] as mahasiswa1,
30              [SITUS1].[SIAKAD].[dbo].[m_prog_studi] as prodi1
31    WHERE     mahasiswa1.id_jenjang = prodi1.id_jenjang AND
32              mahasiswa1.id_fakultas = prodi1.id_fakultas AND
33              mahasiswa1.id_jurusan = prodi1.id_jurusan AND
34              mahasiswa1.id_prog_studi = prodi1.id_prog_studi
35
36    SELECT    temp211.nim,
37              temp211.nama,
38              temp211.id_fakultas,
39              temp211.id_jurusan,
40              temp211.program_studi,
41              jenjang1.content as jenjang
42              into temp212
43    FROM      temp211,
44              [SITUS1].[SIAKAD].[dbo].[m_jenjang] as jenjang1
45    WHERE     temp211.id_jenjang = jenjang1.id_jenjang
46
47    SELECT    temp212.nim,
48              temp212.nama,
49              temp212.id_fakultas,
50              temp212.program_studi,
51              temp212.jenjang,
52              jurusan1.content as jurusan
53              into temp213
54    FROM      temp212,
55              [SITUS1].[SIAKAD].[dbo].[m_jurusan] as jurusan1
56    WHERE     temp212.id_jurusan = jurusan1.id_jurusan
57
58    SELECT    temp213.nim,
59              temp213.nama,
60              temp213.id_fakultas,
61              temp213.program_studi,
62              temp213.jenjang,
63              temp213.jurusan,
64              fakultas1.content as fakultas
65              into temp214
66    FROM      temp213,
67              [SITUS1].[SIAKAD].[dbo].[m_fakultas] as fakultas1
68    WHERE     temp213.id_fakultas = fakultas1.id_fakultas
69    -------------------------------------------------------------------------------------
70    SELECT    mahasiswa2.nim,
71              mahasiswa2.nama,
72              mahasiswa2.id_jenjang,
73              mahasiswa2.id_fakultas,
74              mahasiswa2.id_jurusan,
75              prodi2.content as program_studi
76              into temp221
78    FROM      [SITUS2].[SIAKAD].[dbo].[mono2] as mahasiswa2,
79              [SITUS2].[SIAKAD].[dbo].[m_prog_studi] as prodi2
80    WHERE     mahasiswa2.id_jenjang = prodi2.id_jenjang AND
81              mahasiswa2.id_fakultas = prodi2.id_fakultas AND
82              mahasiswa2.id_jurusan = prodi2.id_jurusan AND
83              mahasiswa2.id_prog_studi = prodi2.id_prog_studi
84
85    SELECT    temp221.nim,
86              temp221.nama,
87              temp221.id_fakultas,
88              temp221.id_jurusan,
89              temp221.program_studi,
90              jenjang2.content as jenjang
91              into temp222
92    FROM      temp221,
93              [SITUS2].[SIAKAD].[dbo].[m_jenjang] as jenjang2
94    WHERE     temp221.id_jenjang = jenjang2.id_jenjang
95
96    SELECT    temp222.nim,
97              temp222.nama,
98              temp222.id_fakultas,
99              temp222.program_studi,
100             temp222.jenjang,
101             jurusan2.content as jurusan
102             into temp223
103   FROM      temp222,
104             [SITUS2].[SIAKAD].[dbo].[m_jurusan] as jurusan2
105   WHERE     temp222.id_jurusan = jurusan2.id_jurusan
106
107   SELECT    temp223.nim,
108             temp223.nama,
```

```
109                        temp223.id_fakultas,
110                        temp223.program_studi,
111                        temp223.jenjang,
112                        temp223.jurusan,
113                        fakultas2.content as fakultas
114                        into temp224
115    FROM      temp223,
116                        [SITUS2].[SIAKAD].[dbo].[m_fakultas] as fakultas2
117    WHERE     temp223.id_fakultas = fakultas2.id_fakultas
118    ----------------------------------------------------------------------------------------
119    SELECT    mahasiswa3.nim,
120                        mahasiswa3.nama,
121                        mahasiswa3.id_jenjang,
122                        mahasiswa3.id_fakultas,
123                        mahasiswa3.id_jurusan,
124                        prodi3.content as program_studi
125                        into temp231
126    FROM      [SITUS3].[SIAKAD].[dbo].[mono2] as mahasiswa3,
127                        [SITUS3].[SIAKAD].[dbo].[m_prog_studi] as prodi3
128    WHERE     mahasiswa3.id_jenjang = prodi3.id_jenjang AND
129                        mahasiswa3.id_fakultas = prodi3.id_fakultas AND
130                        mahasiswa3.id_jurusan = prodi3.id_jurusan AND
131                        mahasiswa3.id_prog_studi = prodi3.id_prog_studi
132
133    SELECT    temp231.nim,
134                        temp231.nama,
135                        temp231.id_fakultas,
136                        temp231.id_jurusan,
137                        temp231.program_studi,
138                        jenjang3.content as jenjang
139                        into temp232
140    FROM      temp231,
141                        [SITUS3].[SIAKAD].[dbo].[m_jenjang] as jenjang3
142    WHERE     temp231.id_jenjang = jenjang3.id_jenjang
143
144    SELECT    temp232.nim,
145                        temp232.nama,
146                        temp232.id_fakultas,
147                        temp232.program_studi,
148                        temp232.jenjang,
149                        jurusan3.content as jurusan
150                        into temp233
151    FROM      temp232,
152                        [SITUS3].[SIAKAD].[dbo].[m_jurusan] as jurusan3
153    WHERE     temp232.id_jurusan = jurusan3.id_jurusan
154
155    SELECT    temp233.nim,
156                        temp233.nama,
157                        temp233.id_fakultas,
158                        temp233.program_studi,
159                        temp233.jenjang,
160                        temp233.jurusan,
161                        fakultas3.content as fakultas
162                        into temp234
163    FROM      temp233,
164                        [SITUS3].[SIAKAD].[dbo].[m_fakultas] as fakultas3
165    WHERE     temp233.id_fakultas = fakultas3.id_fakultas
166    ----------------------------------------------------------------------------------------
167    SELECT    mahasiswa4.nim,
168                        mahasiswa4.nama,
169                        mahasiswa4.id_jenjang,
170                        mahasiswa4.id_fakultas,
171                        mahasiswa4.id_jurusan,
172                        prodi4.content as program_studi
173                        into temp241
174    FROM      [SITUS4].[SIAKAD].[dbo].[mono2] as mahasiswa4,
175                        [SITUS4].[SIAKAD].[dbo].[m_prog_studi] as prodi4
176    WHERE     mahasiswa4.id_jenjang = prodi4.id_jenjang AND
177                        mahasiswa4.id_fakultas = prodi4.id_fakultas AND
178                        mahasiswa4.id_jurusan = prodi4.id_jurusan AND
179                        mahasiswa4.id_prog_studi = prodi4.id_prog_studi
180
181    SELECT    temp241.nim,
182                        temp241.nama,
183                        temp241.id_fakultas,
184                        temp241.id_jurusan,
185                        temp241.program_studi,
186                        jenjang4.content as jenjang
187                        into temp242
188    FROM      temp241,
189                        [SITUS4].[SIAKAD].[dbo].[m_jenjang] as jenjang4
```

```
190   WHERE      temp241.id_jenjang = jenjang4.id_jenjang
191
192   SELECT     temp242.nim,
193                   temp242.nama,
194                   temp242.id_fakultas,
195                   temp242.program_studi,
196                   temp242.jenjang,
197                   jurusan4.content as jurusan
198                   into temp243
199   FROM       temp242,
200                   [SITUS4].[SIAKAD].[dbo].[m_jurusan] as jurusan4
201   WHERE      temp242.id_jurusan = jurusan4.id_jurusan
202
203   SELECT     temp243.nim,
204                   temp243.nama,
205                   temp243.id_fakultas,
206                   temp243.program_studi,
207                   temp243.jenjang,
208                   temp243.jurusan,
209                   fakultas4.content as fakultas
210                   into temp244
211   FROM       temp243,
212                   [SITUS4].[SIAKAD].[dbo].[m_fakultas] as fakultas4
213   WHERE      temp243.id_fakultas = fakultas4.id_fakultas
214   -----------------------------------------------------------------------------------------
215   SELECT     mahasiswa5.nim,
216                   mahasiswa5.nama,
217                   mahasiswa5.id_jenjang,
218                   mahasiswa5.id_fakultas,
219                   mahasiswa5.id_jurusan,
220                   prodi5.content as program_studi
221                   into temp251
222   FROM       [SITUS5].[SIAKAD].[dbo].[mono2] as mahasiswa5,
223                   [SITUS5].[SIAKAD].[dbo].[m_prog_studi] as prodi5
224   WHERE      mahasiswa5.id_jenjang = prodi5.id_jenjang AND
225                   mahasiswa5.id_fakultas = prodi5.id_fakultas AND
226                   mahasiswa5.id_jurusan = prodi5.id_jurusan AND
227                   mahasiswa5.id_prog_studi = prodi5.id_prog_studi
228
229   SELECT     temp251.nim,
230                   temp251.nama,
231                   temp251.id_fakultas,
232                   temp251.id_jurusan,
233                   temp251.program_studi,
234                   jenjang5.content as jenjang
235                   into temp252
236   FROM       temp251,
237                   [SITUS5].[SIAKAD].[dbo].[m_jenjang] as jenjang5
238   WHERE      temp251.id_jenjang = jenjang5.id_jenjang
239
240   SELECT     temp252.nim,
241                   temp252.nama,
242                   temp252.id_fakultas,
243                   temp252.program_studi,
244                   temp252.jenjang,
245                   jurusan5.content as jurusan
246                   into temp253
247   FROM       temp252,
248                   [SITUS5].[SIAKAD].[dbo].[m_jurusan] as jurusan5
249   WHERE      temp252.id_jurusan = jurusan5.id_jurusan
250
251   SELECT     temp253.nim,
252                   temp253.nama,
253                   temp253.id_fakultas,
254                   temp253.program_studi,
255                   temp253.jenjang,
256                   temp253.jurusan,
257                   fakultas5.content as fakultas
258                   into temp254
259   FROM       temp253,
260                   [SITUS5].[SIAKAD].[dbo].[m_fakultas] as fakultas5
261   WHERE      temp253.id_fakultas = fakultas5.id_fakultas
262   -----------------------------------------------------------------------------------------
263   SELECT * FROM temp214
264   UNION ALL
265   SELECT * FROM temp224
266   UNION ALL
267   SELECT * FROM temp234
268   UNION ALL
269   SELECT * FROM temp244
270   UNION ALL
```

```
271    SELECT * FROM temp254
```

Source code 9. *Query* 2 menggunakan metode *Dynamic Approach* pada situs 1

```
1     drop table temp211
2     drop table temp212
3     drop table temp213
4     drop table temp214
5     drop table temp221
6     drop table temp222
7     drop table temp223
8     drop table temp224
9     drop table temp231
10    drop table temp232
11    drop table temp233
12    drop table temp234
13    drop table temp241
14    drop table temp242
15    drop table temp243
16    drop table temp244
17    drop table temp251
18    drop table temp252
19    drop table temp253
20    drop table temp254
21    ------------------------------------------------------------------------------------
22    SELECT    mahasiswa1.nim,
23                     mahasiswa1.nama,
24                     mahasiswa1.id_jenjang,
25                     mahasiswa1.id_fakultas,
26                     mahasiswa1.id_jurusan,
27                     prodi1.content as program_studi
28                     into temp211
29    FROM      [dbo].[mono2] as mahasiswa1,
30                     [dbo].[m_prog_studi] as prodi1
31    WHERE     mahasiswa1.id_jenjang = prodi1.id_jenjang AND
32                     mahasiswa1.id_fakultas = prodi1.id_fakultas AND
33                     mahasiswa1.id_jurusan = prodi1.id_jurusan AND
34                     mahasiswa1.id_prog_studi = prodi1.id_prog_studi
35
36    SELECT    temp211.nim,
37                     temp211.nama,
38                     temp211.id_fakultas,
39                     temp211.id_jurusan,
40                     temp211.program_studi,
41                     jenjang1.content as jenjang
42                     into temp212
43    FROM      temp211,
44                     [dbo].[m_jenjang] as jenjang1
45    WHERE     temp211.id_jenjang = jenjang1.id_jenjang
46
47    SELECT    temp212.nim,
48                     temp212.nama,
49                     temp212.id_fakultas,
50                     temp212.program_studi,
51                     temp212.jenjang,
52                     jurusan1.content as jurusan
53                     into temp213
54    FROM      temp212,
55                     [dbo].[m_jurusan] as jurusan1
56    WHERE     temp212.id_jurusan = jurusan1.id_jurusan
57
58    SELECT    temp213.nim,
59                     temp213.nama,
60                     temp213.id_fakultas,
61                     temp213.program_studi,
62                     temp213.jenjang,
63                     temp213.jurusan,
64                     fakultas1.content as fakultas
65                     into temp214
66    FROM      temp213,
67                     [dbo].[m_fakultas] as fakultas1
68    WHERE     temp213.id_fakultas = fakultas1.id_fakultas
69    ------------------------------------------------------------------------------------
70    SELECT    mahasiswa2.nim,
71                     mahasiswa2.nama,
72                     mahasiswa2.id_jenjang,
73                     mahasiswa2.id_fakultas,
74                     mahasiswa2.id_jurusan,
75                     prodi2.content as program_studi
76                     into temp221
78    FROM      [SITUS2].[SIAKAD].[dbo].[mono2] as mahasiswa2,
```

```
79                             [SITUS2].[SIAKAD].[dbo].[m_prog_studi] as prodi2
80   WHERE     mahasiswa2.id_jenjang = prodi2.id_jenjang AND
81                       mahasiswa2.id_fakultas = prodi2.id_fakultas AND
82                       mahasiswa2.id_jurusan = prodi2.id_jurusan AND
83                       mahasiswa2.id_prog_studi = prodi2.id_prog_studi
84
85   SELECT    temp221.nim,
86                       temp221.nama,
87                       temp221.id_fakultas,
88                       temp221.id_jurusan,
89                       temp221.program_studi,
90                       jenjang2.content as jenjang
91                       into temp222
92   FROM      temp221,
93                       [SITUS2].[SIAKAD].[dbo].[m_jenjang] as jenjang2
94   WHERE     temp221.id_jenjang = jenjang2.id_jenjang
95
96   SELECT    temp222.nim,
97                       temp222.nama,
98                       temp222.id_fakultas,
99                       temp222.program_studi,
100                      temp222.jenjang,
101                      jurusan2.content as jurusan
102                      into temp223
103  FROM      temp222,
104                      [SITUS2].[SIAKAD].[dbo].[m_jurusan] as jurusan2
105  WHERE     temp222.id_jurusan = jurusan2.id_jurusan
106
107  SELECT    temp223.nim,
108                      temp223.nama,
109                      temp223.id_fakultas,
110                      temp223.program_studi,
111                      temp223.jenjang,
112                      temp223.jurusan,
113                      fakultas2.content as fakultas
114                      into temp224
115  FROM      temp223,
116                      [SITUS2].[SIAKAD].[dbo].[m_fakultas] as fakultas2
117  WHERE     temp223.id_fakultas = fakultas2.id_fakultas
118  ------------------------------------------------------------------------------------------------
119  SELECT    mahasiswa3.nim,
120                      mahasiswa3.nama,
121                      mahasiswa3.id_jenjang,
122                      mahasiswa3.id_fakultas,
123                      mahasiswa3.id_jurusan,
124                      prodi3.content as program_studi
125                      into temp231
126  FROM      [SITUS3].[SIAKAD].[dbo].[mono2] as mahasiswa3,
127                      [SITUS3].[SIAKAD].[dbo].[m_prog_studi] as prodi3
128  WHERE     mahasiswa3.id_jenjang = prodi3.id_jenjang AND
129                      mahasiswa3.id_fakultas = prodi3.id_fakultas AND
130                      mahasiswa3.id_jurusan = prodi3.id_jurusan AND
131                      mahasiswa3.id_prog_studi = prodi3.id_prog_studi
132
133  SELECT    temp231.nim,
134                      temp231.nama,
135                      temp231.id_fakultas,
136                      temp231.id_jurusan,
137                      temp231.program_studi,
138                      jenjang3.content as jenjang
139                      into temp232
140  FROM      temp231,
141                      [SITUS3].[SIAKAD].[dbo].[m_jenjang] as jenjang3
142  WHERE     temp231.id_jenjang = jenjang3.id_jenjang
143
144  SELECT    temp232.nim,
145                      temp232.nama,
146                      temp232.id_fakultas,
147                      temp232.program_studi,
148                      temp232.jenjang,
149                      jurusan3.content as jurusan
150                      into temp233
151  FROM      temp232,
152                      [SITUS3].[SIAKAD].[dbo].[m_jurusan] as jurusan3
153  WHERE     temp232.id_jurusan = jurusan3.id_jurusan
154
155  SELECT    temp233.nim,
156                      temp233.nama,
157                      temp233.id_fakultas,
158                      temp233.program_studi,
159                      temp233.jenjang,
```

```
160                         temp233.jurusan,
161                         fakultas3.content as fakultas
162                         into temp234
163   FROM      temp233,
164                         [SITUS3].[SIAKAD].[dbo].[m_fakultas] as fakultas3
165   WHERE     temp233.id_fakultas = fakultas3.id_fakultas
166   -------------------------------------------------------------------------------------
167   SELECT    mahasiswa4.nim,
168                         mahasiswa4.nama,
169                         mahasiswa4.id_jenjang,
170                         mahasiswa4.id_fakultas,
171                         mahasiswa4.id_jurusan,
172                         prodi4.content as program_studi
173                         into temp241
174   FROM      [SITUS4].[SIAKAD].[dbo].[mono2] as mahasiswa4,
175                         [SITUS4].[SIAKAD].[dbo].[m_prog_studi] as prodi4
176   WHERE     mahasiswa4.id_jenjang = prodi4.id_jenjang AND
177                         mahasiswa4.id_fakultas = prodi4.id_fakultas AND
178                         mahasiswa4.id_jurusan = prodi4.id_jurusan AND
179                         mahasiswa4.id_prog_studi = prodi4.id_prog_studi
180
181   SELECT    temp241.nim,
182                         temp241.nama,
183                         temp241.id_fakultas,
184                         temp241.id_jurusan,
185                         temp241.program_studi,
186                         jenjang4.content as jenjang
187                         into temp242
188   FROM      temp241,
189                         [SITUS4].[SIAKAD].[dbo].[m_jenjang] as jenjang4
190   WHERE     temp241.id_jenjang = jenjang4.id_jenjang
191
192   SELECT    temp242.nim,
193                         temp242.nama,
194                         temp242.id_fakultas,
195                         temp242.program_studi,
196                         temp242.jenjang,
197                         jurusan4.content as jurusan
198                         into temp243
199   FROM      temp242,
200                         [SITUS4].[SIAKAD].[dbo].[m_jurusan] as jurusan4
201   WHERE     temp242.id_jurusan = jurusan4.id_jurusan
202
203   SELECT    temp243.nim,
204                         temp243.nama,
205                         temp243.id_fakultas,
206                         temp243.program_studi,
207                         temp243.jenjang,
208                         temp243.jurusan,
209                         fakultas4.content as fakultas
210                         into temp244
211   FROM      temp243,
212                         [SITUS4].[SIAKAD].[dbo].[m_fakultas] as fakultas4
213   WHERE     temp243.id_fakultas = fakultas4.id_fakultas
214   -------------------------------------------------------------------------------------
215   SELECT    mahasiswa5.nim,
216                         mahasiswa5.nama,
217                         mahasiswa5.id_jenjang,
218                         mahasiswa5.id_fakultas,
219                         mahasiswa5.id_jurusan,
220                         prodi5.content as program_studi
221                         into temp251
222   FROM      [SITUS5].[SIAKAD].[dbo].[mono2] as mahasiswa5,
223                         [SITUS5].[SIAKAD].[dbo].[m_prog_studi] as prodi5
224   WHERE     mahasiswa5.id_jenjang = prodi5.id_jenjang AND
225                         mahasiswa5.id_fakultas = prodi5.id_fakultas AND
226                         mahasiswa5.id_jurusan = prodi5.id_jurusan AND
227                         mahasiswa5.id_prog_studi = prodi5.id_prog_studi
228
229   SELECT    temp251.nim,
230                         temp251.nama,
231                         temp251.id_fakultas,
232                         temp251.id_jurusan,
233                         temp251.program_studi,
234                         jenjang5.content as jenjang
235                         into temp252
236   FROM      temp251,
237                         [SITUS5].[SIAKAD].[dbo].[m_jenjang] as jenjang5
238   WHERE     temp251.id_jenjang = jenjang5.id_jenjang
239
240   SELECT    temp252.nim,
```

```
241                       temp252.nama,
242                       temp252.id_fakultas,
243                       temp252.program_studi,
244                       temp252.jenjang,
245                       jurusan5.content as jurusan
246                       into temp253
247    FROM      temp252,
248                       [SITUS5].[SIAKAD].[dbo].[m_jurusan] as jurusan5
249    WHERE     temp252.id_jurusan = jurusan5.id_jurusan
250
251    SELECT    temp253.nim,
252                       temp253.nama,
253                       temp253.id_fakultas,
254                       temp253.program_studi,
255                       temp253.jenjang,
256                       temp253.jurusan,
257                       fakultas5.content as fakultas
258                       into temp254
259    FROM      temp253,
260                       [SITUS5].[SIAKAD].[dbo].[m_fakultas] as fakultas5
261    WHERE     temp253.id_fakultas = fakultas5.id_fakultas
262    ------------------------------------------------------------------------------------
263    SELECT * FROM temp214
264    UNION ALL
265    SELECT * FROM temp224
266    UNION ALL
267    SELECT * FROM temp234
268    UNION ALL
269    SELECT * FROM temp244
270    UNION ALL
271    SELECT * FROM temp254
```

Source code 10. monorelasi *query* 3

```
1    SELECT    mata_kuliah.id_mata_kuliah,
2              mata_kuliah.nama as nama_mata_kuliah,
3              mata_kuliah.id_fakultas,
4              mata_kuliah.id_jenjang,
5              mata_kuliah.id_jurusan,
6              mata_kuliah.id_prog_studi
7    INTO      mono3
8    FROM      mata_kuliah
9    WHERE     mata_kuliah.nama = 'Skripsi'
```

Source code 11. *Query* 3 menggunakan metode *Dynamic Approach* pada situs Laporan

```
1     drop table temp311
2     drop table temp312
3     drop table temp313
4     drop table temp321
5     drop table temp322
6     drop table temp323
7     drop table temp331
8     drop table temp332
9     drop table temp333
10    drop table temp341
11    drop table temp342
12    drop table temp343
13    drop table temp351
14    drop table temp352
15    drop table temp353
16
17    SELECT  mata_kuliah1.nama_mata_kuliah,
18                     khs1.id_nilai as nilai,
19                     mata_kuliah1.id_prog_studi,
20                     mata_kuliah1.id_jurusan,
21                     mata_kuliah1.id_jenjang,
22                     mata_kuliah1.id_fakultas,
23                     khs1.nim into temp311
24    from      [SITUS1].[SIAKAD].[dbo].[mono3] as mata_kuliah1,
25                     [SITUS1].[SIAKAD].[dbo].[khs] as khs1
26    where   khs1.id_mata_kuliah = mata_kuliah1.id_mata_kuliah
27
28    SELECT  temp311.nim,
29                     temp311.nama_mata_kuliah,
30                     prodi1.id_prog_studi,
31                     prodi1.id_jurusan,
32                     prodi1.id_jenjang,
```

```
33                        prodi1.id_fakultas,
34                        temp311.nilai
35                        into temp312
36    from        temp311,
37                        [SITUS1].[SIAKAD].[dbo].[m_prog_studi] as prodi1
38    where   temp311.id_prog_studi = prodi1.id_prog_studi AND
39                        temp311.id_jurusan        = prodi1.id_jurusan AND
40                        temp311.id_jenjang = prodi1.id_jenjang AND
41                        temp311.id_fakultas = prodi1.id_fakultas
42
43    SELECT     mahasiswa1.nim,
44                        mahasiswa1.nama,
45                        mahasiswa1.angkatan,
46                        temp312.nama_mata_kuliah,
47                        temp312.nilai
48                        into temp313
49    FROM        temp312, [SITUS1].[SIAKAD].[dbo].[mahasiswa] as mahasiswa1
50    WHERE        temp312.nim = mahasiswa1.nim
51    --------------------------------------------------------------------------------------------
52    SELECT  mata_kuliah2.nama_mata_kuliah,
53                        khs2.id_nilai as nilai,
54                        mata_kuliah2.id_prog_studi,
55                        mata_kuliah2.id_jurusan,
56                        mata_kuliah2.id_jenjang,
57                        mata_kuliah2.id_fakultas,
58                        khs2.nim into temp321
59    from        [SITUS2].[SIAKAD].[dbo].[mono3] as mata_kuliah2,
60                        [SITUS2].[SIAKAD].[dbo].[khs] as khs2
61    where   khs2.id_mata_kuliah = mata_kuliah2.id_mata_kuliah
62
63    SELECT  temp321.nim,
64                        temp321.nama_mata_kuliah,
65                        prodi2.id_prog_studi,
66                        prodi2.id_jurusan,
67                        prodi2.id_jenjang,
68                        prodi2.id_fakultas,
69                        temp321.nilai
70                        into temp322
71    from        temp321,
72                        [SITUS2].[SIAKAD].[dbo].[m_prog_studi] as prodi2
73    where   temp321.id_prog_studi = prodi2.id_prog_studi AND
74                        temp321.id_jurusan        = prodi2.id_jurusan AND
75                        temp321.id_jenjang = prodi2.id_jenjang AND
76                        temp321.id_fakultas = prodi2.id_fakultas
78    SELECT     mahasiswa2.nim,
79                        mahasiswa2.nama,
80                        mahasiswa2.nama,
81                        mahasiswa2.angkatan,
82                        temp322.nama_mata_kuliah,
83                        temp322.nilai
84                        into temp323
85    FROM        temp322, [SITUS2].[SIAKAD].[dbo].[mahasiswa] as mahasiswa2
86    WHERE        temp322.nim = mahasiswa2.nim
87    --------------------------------------------------------------------------------------------
88    SELECT  mata_kuliah3.nama_mata_kuliah,
89                        khs3.id_nilai as nilai,
90                        mata_kuliah3.id_prog_studi,
91                        mata_kuliah3.id_jurusan,
92                        mata_kuliah3.id_jenjang,
93                        mata_kuliah3.id_fakultas,
94                        khs3.nim into temp331
95    from        [SITUS3].[SIAKAD].[dbo].[mono3] as mata_kuliah3,
96                        [SITUS3].[SIAKAD].[dbo].[khs] as khs3
97    where   khs3.id_mata_kuliah = mata_kuliah3.id_mata_kuliah
98
99    SELECT  temp331.nim,
100                        temp331.nama_mata_kuliah,
101                        prodi3.id_prog_studi,
102                        prodi3.id_jurusan,
103                        prodi3.id_jenjang,
104                        prodi3.id_fakultas,
105                        temp331.nilai
106                        into temp332
107   from        temp331,
108                        [SITUS3].[SIAKAD].[dbo].[m_prog_studi] as prodi3
109   where   temp331.id_prog_studi = prodi3.id_prog_studi AND
110                        temp331.id_jurusan        = prodi3.id_jurusan AND
111                        temp331.id_jenjang = prodi3.id_jenjang AND
112                        temp331.id_fakultas = prodi3.id_fakultas
113
114   SELECT     mahasiswa3.nim,
```

```
115                     mahasiswa3.nama,
116                     mahasiswa3.angkatan,
117                     temp332.nama_mata_kuliah,
118                     temp332.nilai
119                     into temp333
120    FROM        temp332, [SITUS3].[SIAKAD].[dbo].[mahasiswa] as mahasiswa3
121    WHERE       temp332.nim = mahasiswa3.nim
122    -------------------------------------------------------------------------------------
123    SELECT  mata_kuliah4.nama_mata_kuliah,
124                     khs4.id_nilai as nilai,
125                     mata_kuliah4.id_prog_studi,
126                     mata_kuliah4.id_jurusan,
127                     mata_kuliah4.id_jenjang,
128                     mata_kuliah4.id_fakultas,
129                     khs4.nim into temp341
130    from        [SITUS4].[SIAKAD].[dbo].[mono3] as mata_kuliah4,
131                     [SITUS4].[SIAKAD].[dbo].[khs] as khs4
132    where  khs4.id_mata_kuliah = mata_kuliah4.id_mata_kuliah
133
134    SELECT  temp341.nim,
135                     temp341.nama_mata_kuliah,
136                     prodi4.id_prog_studi,
137                     prodi4.id_jurusan,
138                     prodi4.id_jenjang,
139                     prodi4.id_fakultas,
140                     temp341.nilai
141                     into temp342
142    from        temp341,
143                     [SITUS4].[SIAKAD].[dbo].[m_prog_studi] as prodi4
144    where  temp341.id_prog_studi = prodi4.id_prog_studi AND
145                     temp341.id_jurusan       = prodi4.id_jurusan AND
146                     temp341.id_jenjang = prodi4.id_jenjang AND
147                     temp341.id_fakultas = prodi4.id_fakultas
148
149    SELECT   mahasiswa4.nim,
150                     mahasiswa4.nama,
151                     mahasiswa4.angkatan,
152                     temp342.nama_mata_kuliah,
153                     temp342.nilai
154                     into temp343
155    FROM        temp342, [SITUS4].[SIAKAD].[dbo].[mahasiswa] as mahasiswa4
156    WHERE       temp342.nim = mahasiswa4.nim
157    -------------------------------------------------------------------------------------
158    SELECT  mata_kuliah5.nama_mata_kuliah,
159                     khs5.id_nilai as nilai,
160                     mata_kuliah5.id_prog_studi,
161                     mata_kuliah5.id_jurusan,
162                     mata_kuliah5.id_jenjang,
163                     mata_kuliah5.id_fakultas,
164                     khs5.nim into temp351
165    from        [SITUS5].[SIAKAD].[dbo].[mono3] as mata_kuliah5,
166                     [SITUS5].[SIAKAD].[dbo].[khs] as khs5
167    where  khs5.id_mata_kuliah = mata_kuliah5.id_mata_kuliah
168
169    SELECT  temp351.nim,
170                     temp351.nama_mata_kuliah,
171                     prodi5.id_prog_studi,
172                     prodi5.id_jurusan,
173                     prodi5.id_jenjang,
174                     prodi5.id_fakultas,
175                     temp351.nilai
176                     into temp352
177    from        temp351,
178                     [SITUS5].[SIAKAD].[dbo].[m_prog_studi] as prodi5
179    where  temp351.id_prog_studi = prodi5.id_prog_studi AND
180                     temp351.id_jurusan       = prodi5.id_jurusan AND
181                     temp351.id_jenjang = prodi5.id_jenjang AND
182                     temp351.id_fakultas = prodi5.id_fakultas
183
184    SELECT   mahasiswa5.nim,
185                     mahasiswa5.nama,
186                     mahasiswa5.angkatan,
187                     temp352.nama_mata_kuliah,
188                     temp352.nilai
189                     into temp353
190    FROM        temp352, [SITUS5].[SIAKAD].[dbo].[mahasiswa] as mahasiswa5
191    WHERE       temp352.nim = mahasiswa5.nim
192    -------------------------------------------------------------------------------------
193    SELECT * FROM temp313
194    UNION ALL
195    SELECT * FROM temp323
```

```
196   UNION ALL
197   SELECT * FROM temp333
198   UNION ALL
199   SELECT * FROM temp343
200   UNION ALL
201   SELECT * FROM temp353
```

Source code 11. *Query* 3 menggunakan metode *Dynamic Approach* pada situs 1

```
1    drop table temp311
2    drop table temp312
3    drop table temp313
4    drop table temp321
5    drop table temp322
6    drop table temp323
7    drop table temp331
8    drop table temp332
9    drop table temp333
10   drop table temp341
11   drop table temp342
12   drop table temp343
13   drop table temp351
14   drop table temp352
15   drop table temp353
16
17   SELECT  mata_kuliah1.nama_mata_kuliah,
18                 khs1.id_nilai as nilai,
19                 mata_kuliah1.id_prog_studi,
20                 mata_kuliah1.id_jurusan,
21                 mata_kuliah1.id_jenjang,
22                 mata_kuliah1.id_fakultas,
23                 khs1.nim into temp311
24   from     [dbo].[mono3] as mata_kuliah1,
25                 [dbo].[khs] as khs1
26   where   khs1.id_mata_kuliah = mata_kuliah1.id_mata_kuliah
27
28   SELECT  temp311.nim,
29                 temp311.nama_mata_kuliah,
30                 prodi1.id_prog_studi,
31                 prodi1.id_jurusan,
32                 prodi1.id_jenjang,
33                 prodi1.id_fakultas,
34                 temp311.nilai
35                 into temp312
36   from     temp311,
37                 [dbo].[m_prog_studi] as prodi1
38   where   temp311.id_prog_studi = prodi1.id_prog_studi AND
39                 temp311.id_jurusan      = prodi1.id_jurusan AND
40                 temp311.id_jenjang = prodi1.id_jenjang AND
41                 temp311.id_fakultas = prodi1.id_fakultas
42
43   SELECT    mahasiswa1.nim,
44                 mahasiswa1.nama,
45                 mahasiswa1.angkatan,
46                 temp312.nama_mata_kuliah,
47                 temp312.nilai
48                 into temp313
49   FROM      temp312, [dbo].[mahasiswa] as mahasiswa1
50   WHERE     temp312.nim = mahasiswa1.nim
51   -------------------------------------------------------------------------------------------------
52   SELECT  mata_kuliah2.nama_mata_kuliah,
53                 khs2.id_nilai as nilai,
54                 mata_kuliah2.id_prog_studi,
55                 mata_kuliah2.id_jurusan,
56                 mata_kuliah2.id_jenjang,
57                 mata_kuliah2.id_fakultas,
58                 khs2.nim into temp321
59   from     [SITUS2].[SIAKAD].[dbo].[mono3] as mata_kuliah2,
60                 [SITUS2].[SIAKAD].[dbo].[khs] as khs2
61   where   khs2.id_mata_kuliah = mata_kuliah2.id_mata_kuliah
62
63   SELECT  temp321.nim,
64                 temp321.nama_mata_kuliah,
65                 prodi2.id_prog_studi,
66                 prodi2.id_jurusan,
67                 prodi2.id_jenjang,
68                 prodi2.id_fakultas,
69                 temp321.nilai
70                 into temp322
71   from     temp321,
72                 [SITUS2].[SIAKAD].[dbo].[m_prog_studi] as prodi2
```

```
73    where   temp321.id_prog_studi = prodi2.id_prog_studi AND
74                        temp321.id_jurusan      = prodi2.id_jurusan AND
75                        temp321.id_jenjang = prodi2.id_jenjang AND
76                        temp321.id_fakultas = prodi2.id_fakultas
78
79    SELECT    mahasiswa2.nim,
80                        mahasiswa2.nama,
81                        mahasiswa2.angkatan,
82                        temp322.nama_mata_kuliah,
83                        temp322.nilai
84                        into temp323
85    FROM        temp322, [SITUS2].[SIAKAD].[dbo].[mahasiswa] as mahasiswa2
86    WHERE       temp322.nim = mahasiswa2.nim
87    -----------------------------------------------------------------------------------------------------
88    SELECT  mata_kuliah3.nama_mata_kuliah,
89                        khs3.id_nilai as nilai,
90                        mata_kuliah3.id_prog_studi,
91                        mata_kuliah3.id_jurusan,
92                        mata_kuliah3.id_jenjang,
93                        mata_kuliah3.id_fakultas,
94                        khs3.nim into temp331
95    from        [SITUS3].[SIAKAD].[dbo].[mono3] as mata_kuliah3,
96                        [SITUS3].[SIAKAD].[dbo].[khs] as khs3
97    where   khs3.id_mata_kuliah = mata_kuliah3.id_mata_kuliah
98
99    SELECT  temp331.nim,
100                        temp331.nama_mata_kuliah,
101                        prodi3.id_prog_studi,
102                        prodi3.id_jurusan,
103                        prodi3.id_jenjang,
104                        prodi3.id_fakultas,
105                        temp331.nilai
106                        into temp332
107   from        temp331,
108                        [SITUS3].[SIAKAD].[dbo].[m_prog_studi] as prodi3
109   where   temp331.id_prog_studi = prodi3.id_prog_studi AND
110                        temp331.id_jurusan      = prodi3.id_jurusan AND
111                        temp331.id_jenjang = prodi3.id_jenjang AND
112                        temp331.id_fakultas = prodi3.id_fakultas
113
114   SELECT    mahasiswa3.nim,
115                        mahasiswa3.nama,
116                        mahasiswa3.angkatan,
117                        temp332.nama_mata_kuliah,
118                        temp332.nilai
119                        into temp333
120   FROM        temp332, [SITUS3].[SIAKAD].[dbo].[mahasiswa] as mahasiswa3
121   WHERE       temp332.nim = mahasiswa3.nim
122   -----------------------------------------------------------------------------------------------------
123   SELECT  mata_kuliah4.nama_mata_kuliah,
124                        khs4.id_nilai as nilai,
125                        mata_kuliah4.id_prog_studi,
126                        mata_kuliah4.id_jurusan,
127                        mata_kuliah4.id_jenjang,
128                        mata_kuliah4.id_fakultas,
129                        khs4.nim into temp341
130   from        [SITUS4].[SIAKAD].[dbo].[mono3] as mata_kuliah4,
131                        [SITUS4].[SIAKAD].[dbo].[khs] as khs4
132   where   khs4.id_mata_kuliah = mata_kuliah4.id_mata_kuliah
133
134   SELECT  temp341.nim,
135                        temp341.nama_mata_kuliah,
136                        prodi4.id_prog_studi,
137                        prodi4.id_jurusan,
138                        prodi4.id_jenjang,
139                        prodi4.id_fakultas,
140                        temp341.nilai
141                        into temp342
142   from        temp341,
143                        [SITUS4].[SIAKAD].[dbo].[m_prog_studi] as prodi4
144   where   temp341.id_prog_studi = prodi4.id_prog_studi AND
145                        temp341.id_jurusan      = prodi4.id_jurusan AND
146                        temp341.id_jenjang = prodi4.id_jenjang AND
147                        temp341.id_fakultas = prodi4.id_fakultas
148
149   SELECT    mahasiswa4.nim,
150                        mahasiswa4.nama,
151                        mahasiswa4.angkatan,
152                        temp342.nama_mata_kuliah,
153                        temp342.nilai
154                        into temp343
```

```
155   FROM        temp342, [SITUS4].[SIAKAD].[dbo].[mahasiswa] as mahasiswa4
156   WHERE       temp342.nim = mahasiswa4.nim
157   -------------------------------------------------------------------------------------------
158   SELECT  mata_kuliah5.nama_mata_kuliah,
159                      khs5.id_nilai as nilai,
160                      mata_kuliah5.id_prog_studi,
161                      mata_kuliah5.id_jurusan,
162                      mata_kuliah5.id_jenjang,
163                      mata_kuliah5.id_fakultas,
164                      khs5.nim into temp351
165   from        [SITUS5].[SIAKAD].[dbo].[mono3] as mata_kuliah5,
166               [SITUS5].[SIAKAD].[dbo].[khs] as khs5
167   where  khs5.id_mata_kuliah = mata_kuliah5.id_mata_kuliah
168
169   SELECT temp351.nim,
170                      temp351.nama_mata_kuliah,
171                      prodi5.id_prog_studi,
172                      prodi5.id_jurusan,
173                      prodi5.id_jenjang,
174                      prodi5.id_fakultas,
175                      temp351.nilai
176                      into temp352
177   from        temp351,
178               [SITUS5].[SIAKAD].[dbo].[m_prog_studi] as prodi5
179   where  temp351.id_prog_studi = prodi5.id_prog_studi AND
180               temp351.id_jurusan      = prodi5.id_jurusan AND
181               temp351.id_jenjang = prodi5.id_jenjang AND
182               temp351.id_fakultas = prodi5.id_fakultas
183
184   SELECT     mahasiswa5.nim,
185                      mahasiswa5.nama,
186                      mahasiswa5.angkatan,
187                      temp352.nama_mata_kuliah,
188                      temp352.nilai
189                      into temp353
190   FROM        temp352, [SITUS5].[SIAKAD].[dbo].[mahasiswa] as mahasiswa5
191   WHERE       temp352.nim = mahasiswa5.nim
192   -------------------------------------------------------------------------------------------
193   SELECT * FROM temp313
194   UNION ALL
195   SELECT * FROM temp323
196   UNION ALL
197   SELECT * FROM temp333
198   UNION ALL
199   SELECT * FROM temp343
200   UNION ALL
201   SELECT * FROM temp353
```

Lampiran 4. *Source code* Implementasi *Linked Server*

Source code 12. pembuatan *Linked Server*

```
1    EXEC master.dbo.sp_aDMLinkedserver @server = N'ip_address', @srvproduct=N'SQL Server'
2    EXEC master.dbo.sp_aDMLinkedsrvlogin
3    @rmtsrvname=N'ip_address',@useself=N'False',@locallogin=NULL,@rmtuser=NULL,@rmtpassword=NULL
4    EXEC master.dbo.sp_aDMLinkedsrvlogin
5    @rmtsrvname=N'ip_address',@useself=N'False',@locallogin=N'report',@rmtuser=N'username',@rmtpassword='password'
6    EXEC master.dbo.sp_serveroption @server=N'ip_address', @optname=N'collation compatible', @optvalue=N'false'
7    EXEC master.dbo.sp_serveroption @server=N'ip_address', @optname=N'data access', @optvalue=N'true'
8    EXEC master.dbo.sp_serveroption @server=N'ip_address', @optname=N'dist', @optvalue=N'false'
9    EXEC master.dbo.sp_serveroption @server=N'ip_address', @optname=N'pub', @optvalue=N'false'
10   EXEC master.dbo.sp_serveroption @server=N'ip_address', @optname=N'rpc', @optvalue=N'true'
11   EXEC master.dbo.sp_serveroption @server=N'ip_address', @optname=N'rpc out', @optvalue=N'true'
12   EXEC master.dbo.sp_serveroption @server=N'ip_address', @optname=N'sub', @optvalue=N'false'
13   EXEC master.dbo.sp_serveroption @server=N'ip_address', @optname=N'connect timeout', @optvalue=N'0'
14   EXEC master.dbo.sp_serveroption @server=N'ip_address', @optname=N'collation name', @optvalue=null
15   EXEC master.dbo.sp_serveroption @server=N'ip_address', @optname=N'lazy schema validation', @optvalue=N'false'
16   EXEC master.dbo.sp_serveroption @server=N'ip_address', @optname=N'query timeout', @optvalue=N'0'
17   EXEC master.dbo.sp_serveroption @server=N'ip_address', @optname=N'use remote collation', @optvalue=N'true'
18   EXEC master.dbo.sp_serveroption @server=N'ip_address', @optname=N'remote proc transaction promotion', @optvalue=N'true'
```

Lampiran 5. *Source code* Menambah *User*

Source code 13. menambahkan *user* pada basis data

```
1    CREATE LOGIN [username] WITH PASSWORD=N'''=password''', DEFAULT_DATABASE=[database_name],
2    DEFAULT_LANGUAGE=[default_language], CHECK_EXPIRATION=OFF, CHECK_POLICY=OFF
3    EXEC sys.sp_addsrvrolemember @loginame = N'username', @rolename = N'user_role'
4    ALTER LOGIN [report] DISABLE
```