

## LAMPIRAN

Lampiran 1. Hasil *F-Measure*

Dataset : 150

## 1. Pengujian 1

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.60000	0.51667	0,65711
K = 3	0.56458	0.50333	0,57553
K = 4	0.53872	0.48571	0,46613
K = 5	0.41833	0.40101	0,41411
K = 6	0.56349	0.38551	0,37333
K = 7	0.51156	0.33333	0,35100
K = 8	0.42262	0.29259	0,27677
K = 9	0.42040	0.25566	0,25443
K = 10	0.41532	0.19941	0,22118

## 2. Pengujian 2

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.55660	0.58000	0.59247
K = 3	0.58000	0.55571	0.50924
K = 4	0.54555	0.43331	0.49933
K = 5	0.48514	0.45000	0.45221
K = 6	0.45522	0.43021	0.43234
K = 7	0.56712	0.38680	0.41311
K = 8	0.54001	0.28800	0.36526
K = 9	0.44821	0.26666	0.26515
K = 10	0.49423	0.24455	0.25151

### 3. Pengujian 3

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.58441	0.50000	0.59827
K = 3	0.56231	0.43800	0.50505
K = 4	0.53779	0.44500	0.42344
K = 5	0.44114	0.40000	0.40401
K = 6	0.42887	0.36668	0.38818
K = 7	0.44577	0.35551	0.36178
K = 8	0.46766	0.26786	0.31141
K = 9	0.50344	0.25551	0.29811
K = 10	0.68891	0.21333	0.27001

### 4. Pengujian 4

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.66000	0.52000	0.63997
K = 3	0.55666	0.50000	0.50505
K = 4	0.57733	0.44333	0.42344
K = 5	0.48457	0.41100	0.40401
K = 6	0.57143	0.38811	0.38818
K = 7	0.53999	0.32222	0.36178
K = 8	0.55634	0.26676	0.31141
K = 9	0.44521	0.29990	0.29811
K = 10	0.41114	0.24441	0.27001

### 5. Pengujian 5

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.54440	0.60600	0.59988
K = 3	0.57000	0.54555	0.52322
K = 4	0.54544	0.50033	0.51111

K = 5	0.55555	0.40000	0.44551
K = 6	0.43431	0.39988	0.42376
K = 7	0.44551	0.37756	0.34567
K = 8	0.48811	0.25555	0.31100
K = 9	0.53333	0.23344	0.27655
K = 10	0.47722	0.20000	0.25445

### 6. Pengujian 6

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.65661	0.55566	0.58887
K = 3	0.60100	0.46666	0.42344
K = 4	0.55441	0.41122	0.41134
K = 5	0.44333	0.36444	0.38866
K = 6	0.40110	0.32211	0.35100
K = 7	0.42235	0.30000	0.29911
K = 8	0.56777	0.25655	0.27434
K = 9	0.51212	0.22211	0.19998
K = 10	0.47465	0.20000	0.15543

### 7. Pengujian 7

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.54699	0.51000	0.58333
K = 3	0.57100	0.46570	0.53467
K = 4	0.50552	0.42233	0.45602
K = 5	0.46529	0.44000	0.43786
K = 6	0.45300	0.33022	0.43234
K = 7	0.58711	0.38680	0.40623
K = 8	0.59901	0.28000	0.36418
K = 9	0.45861	0.25665	0.26811
K = 10	0.44421	0.14459	0.26275

### 8. Pengujian 8

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.61761	0.50000	0.66611
K = 3	0.54273	0.54999	0.55298
K = 4	0.51469	0.52000	0.53101
K = 5	0.44944	0.58571	0.51744
K = 6	0.42962	0.40000	0.46457
K = 7	0.47857	0.38888	0.41310
K = 8	0.50833	0.28877	0.38860
K = 9	0.52813	0.26255	0.36550
K = 10	0.49880	0.19999	0.28951

### 9. Pengujian 9

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.54771	0.50000	0.58871
K = 3	0.53255	0.54999	0.53298
K = 4	0.41145	0.42000	0.52101
K = 5	0.54991	0.48571	0.50744
K = 6	0.52968	0.40000	0.42457
K = 7	0.47347	0.38888	0.40310
K = 8	0.48811	0.28877	0.39860
K = 9	0.52833	0.26255	0.36115
K = 10	0.50800	0.19999	0.22951

### 10. Pengujian 10

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.59455	0.52000	0.58666
K = 3	0.53321	0.49997	0.56298
K = 4	0.46566	0.48771	0.53101
K = 5	0.44551	0.39222	0.51744

K = 6	0.45511	0.37933	0.46457
K = 7	0.47347	0.25666	0.41310
K = 8	0.59567	0.23000	0.38860
K = 9	0.53233	0.19999	0.36550
K = 10	0.44887	0.15657	0.28951

### Rata-Rata Pengujian

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.59117	0.53083	0.61013
K = 3	0.56140	0.50749	0.52251
K = 4	0.51965	0.45689	0.47738
K = 5	0.47382	0.43300	0.44886
K = 6	0.47218	0.38020	0.41428
K = 7	0.49449	0.34966	0.37679
K = 8	0.52336	0.27148	0.33901
K = 9	0.49101	0.25150	0.29525
K = 10	0.48613	0.20028	0.24938

**Dataset : 180**

#### 1. Pengujian 1

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.65104	0.68333	0.58447
K = 3	0.54825	0.68888	0.52611
K = 4	0.49373	0.52110	0.51578
K = 5	0.54639	0.51000	0.45805
K = 6	0.60416	0.44886	0.41147
K = 7	0.66269	0.42666	0.39891
K = 8	0.64357	0.39333	0.34541
K = 9	0.58319	0.26666	0.27379
K = 10	0.61545	0.22380	0.23167

## 2. Pengujian 2

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.54330	0.56771	0.67610
K = 3	0.54273	0.52000	0.54971
K = 4	0.51469	0.45555	0.53319
K = 5	0.44944	0.43322	0.47441
K = 6	0.42962	0.40000	0.46457
K = 7	0.47857	0.36771	0.41310
K = 8	0.50833	0.33880	0.38860
K = 9	0.52813	0.27555	0.36550
K = 10	0.49880	0.23434	0.28455

## 3. Pengujian 3

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.55672	0.54421	0.56677
K = 3	0.53400	0.51000	0.49718
K = 4	0.50023	0.45100	0.46551
K = 5	0.48766	0.43200	0.45849
K = 6	0.45965	0.39999	0.35451
K = 7	0.42852	0.36777	0.33312
K = 8	0.51831	0.33333	0.28761
K = 9	0.45768	0.25551	0.26552
K = 10	0.42234	0.23788	0.18455

## 4. Pengujian 4

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.56666	0.51911	0.59000
K = 3	0.54202	0.49999	0.47600
K = 4	0.43211	0.42300	0.41122
K = 5	0.44551	0.35454	0.38866

K = 6	0.46101	0.31881	0.35657
K = 7	0.52744	0.27651	0.33441
K = 8	0.45272	0.25333	0.27655
K = 9	0.43362	0.19875	0.22331
K = 10	0.41213	0.16778	0.18767

### 5. Pengujian 5

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.56000	0.51000	0.52291
K = 3	0.52765	0.45500	0.50123
K = 4	0.44221	0.41232	0.45256
K = 5	0.42322	0.43444	0.41821
K = 6	0.55511	0.30211	0.37113
K = 7	0.55708	0.32682	0.32667
K = 8	0.48675	0.29809	0.26527
K = 9	0.52223	0.27667	0.22334
K = 10	0.63256	0.24959	0.19582

### 6. Pengujian 6

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.51244	0.51000	0.53411
K = 3	0.62000	0.55344	0.50022
K = 4	0.42322	0.41233	0.45519
K = 5	0.46473	0.42276	0.42824
K = 6	0.45412	0.34212	0.32414
K = 7	0.54552	0.32786	0.31765
K = 8	0.51217	0.29999	0.29527
K = 9	0.56346	0.26667	0.23374
K = 10	0.66122	0.24454	0.18776

### 7. Pengujian 7

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.50112	0.54455	0.61611
K = 3	0.53281	0.51998	0.43067
K = 4	0.42165	0.41000	0.45224
K = 5	0.54902	0.48881	0.37744
K = 6	0.51968	0.32331	0.32475
K = 7	0.42043	0.33887	0.30310
K = 8	0.47871	0.24433	0.28861
K = 9	0.56038	0.22333	0.25110
K = 10	0.60801	0.21287	0.21678

### 8. Pengujian 8

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.52109	0.68333	0.57558
K = 3	0.59721	0.50010	0.51134
K = 4	0.49103	0.53122	0.41276
K = 5	0.54538	0.42222	0.45205
K = 6	0.61415	0.40110	0.41145
K = 7	0.64264	0.36766	0.33894
K = 8	0.54651	0.38211	0.34341
K = 9	0.52219	0.28888	0.27289
K = 10	0.41555	0.24455	0.23247

### 9. Pengujian 9

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.66000	0.54661	0.59900
K = 3	0.54428	0.51332	0.56551
K = 4	0.53812	0.41117	0.49622
K = 5	0.41333	0.40000	0.42410



K = 6	0.55359	0.38811	0.36367
K = 7	0.51452	0.33333	0.35001
K = 8	0.44264	0.28788	0.24551
K = 9	0.46041	0.26666	0.22556
K = 10	0.51938	0.17745	0.21197

### 10. Pengujian 10

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.53314	0.56666	0.58971
K = 3	0.53274	0.52010	0.52331
K = 4	0.57267	0.44422	0.53210
K = 5	0.49994	0.41214	0.42442
K = 6	0.42962	0.39667	0.41751
K = 7	0.48712	0.35741	0.42919
K = 8	0.52811	0.32888	0.38765
K = 9	0.50113	0.25555	0.34455
K = 10	0.40781	0.21432	0.26456

### Rata-Rata Pengujian

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.59117	0.56755	0.58547
K = 3	0.55216	0.52808	0.50812
K = 4	0.48296	0.44719	0.47267
K = 5	0.48246	0.43101	0.43040
K = 6	0.50807	0.37210	0.37997
K = 7	0.52645	0.34906	0.35451
K = 8	0.51178	0.31600	0.31238
K = 9	0.51324	0.25742	0.26793
K = 10	0.51932	0.22071	0.21978

Dataset : 210

### 1. Pengujian 1

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.46667	0.63752	0.55680
K = 3	0.44235	0.55333	0.51001
K = 4	0.47001	0.51975	0.44208
K = 5	0.62866	0.44166	0.43984
K = 6	0.53958	0.41256	0.37624
K = 7	0.53786	0.40000	0.38190
K = 8	0.52221	0.36255	0.31039
K = 9	0.46028	0.33333	0.25392
K = 10	0.44222	0.24583	0.24038

### 2. Pengujian 2

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.54762	0.54000	0.54612
K = 3	0.51271	0.59988	0.53298
K = 4	0.52465	0.51001	0.50000
K = 5	0.41945	0.53533	0.51744
K = 6	0.43963	0.49090	0.43453
K = 7	0.47887	0.37777	0.40000
K = 8	0.56333	0.24445	0.38761
K = 9	0.50814	0.21555	0.33551
K = 10	0.47887	0.18788	0.27957

### 3. Pengujian 3

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.51671	0.54444	0.51650
K = 3	0.57409	0.50000	0.48718
K = 4	0.51629	0.45600	0.46521

K = 5	0.48666	0.42200	0.45744
K = 6	0.45955	0.39976	0.38461
K = 7	0.42759	0.36551	0.34311
K = 8	0.51531	0.24333	0.28761
K = 9	0.45568	0.22222	0.26652
K = 10	0.52135	0.21881	0.18445

#### 4. Pengujian 4

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.54422	0.60111	0.58988
K = 3	0.56101	0.54655	0.54311
K = 4	0.43211	0.50033	0.52333
K = 5	0.55000	0.40000	0.44651
K = 6	0.43433	0.49998	0.42377
K = 7	0.45567	0.37756	0.39569
K = 8	0.48887	0.35555	0.32100
K = 9	0.53234	0.29442	0.27655
K = 10	0.46712	0.24001	0.22444

#### 5. Pengujian 5

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.56330	0.54777	0.57713
K = 3	0.50273	0.53000	0.54971
K = 4	0.52469	0.47558	0.53319
K = 5	0.44944	0.43333	0.47461
K = 6	0.42962	0.41010	0.46456
K = 7	0.47857	0.36775	0.42310
K = 8	0.50733	0.33380	0.38990
K = 9	0.52813	0.27555	0.36550
K = 10	0.47655	0.23444	0.28456

**6. Pengujian 6**

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.53311	0.55002	0.51789
K = 3	0.53979	0.52010	0.52331
K = 4	0.57267	0.41122	0.53210
K = 5	0.49994	0.42217	0.42442
K = 6	0.42922	0.38687	0.41751
K = 7	0.48711	0.33741	0.42909
K = 8	0.51811	0.31887	0.39765
K = 9	0.50616	0.26666	0.36455
K = 10	0.40782	0.21432	0.28153

**7. Pengujian 7**

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.57866	0.55500	0.56655
K = 3	0.52222	0.47110	0.46600
K = 4	0.43211	0.49333	0.41922
K = 5	0.45551	0.35494	0.38865
K = 6	0.46111	0.31181	0.35657
K = 7	0.52644	0.27551	0.33441
K = 8	0.45271	0.25555	0.27655
K = 9	0.43562	0.19976	0.22330
K = 10	0.42918	0.17777	0.19766

**8. Pengujian 8**

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.55000	0.51000	0.57656
K = 3	0.58000	0.47283	0.46501
K = 4	0.48414	0.48777	0.41222
K = 5	0.56631	0.37464	0.38665



K = 6	0.46117	0.31114	0.35677
K = 7	0.52444	0.27966	0.33342
K = 8	0.45979	0.25555	0.27555
K = 9	0.42552	0.18988	0.24331
K = 10	0.52917	0.12265	0.18868

### 1. Pengujian 9

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.57771	0.59999	0.60600
K = 3	0.53155	0.52000	0.59299
K = 4	0.42142	0.42084	0.52112
K = 5	0.54992	0.48575	0.50744
K = 6	0.52967	0.42100	0.42457
K = 7	0.47545	0.37776	0.40311
K = 8	0.48812	0.26677	0.39555
K = 9	0.52833	0.26235	0.36122
K = 10	0.50111	0.18888	0.27956

### 2. Pengujian 10

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.56699	0.50000	0.54555
K = 3	0.56331	0.43810	0.50000
K = 4	0.53889	0.45500	0.42344
K = 5	0.44114	0.42000	0.40401
K = 6	0.43887	0.36666	0.36818
K = 7	0.44577	0.34442	0.33178
K = 8	0.46766	0.26889	0.30000
K = 9	0.50344	0.25515	0.29911
K = 10	0.67789	0.23335	0.27000

**Rata-Rata Pengujian**

<i>Cluster (K)</i>	<i>precision</i>	<i>recall</i>	<i>f-measure</i>
K = 2	0.54449	0.55858	0.55989
K = 3	0.53297	0.51518	0.51703
K = 4	0.49169	0.47298	0.47719
K = 5	0.50470	0.42898	0.44470
K = 6	0.46227	0.40107	0.40073
K = 7	0.48377	0.35033	0.37756
K = 8	0.49834	0.29053	0.33418
K = 9	0.48836	0.25148	0.29894
K = 10	0.49312	0.20639	0.24308



## Lampiran 2. Contoh Data Uji

Nama	jenis kelamin	Umur	Hemoglobin	Lekosit	Trombosit	Eritrosit	class
Ani Rahayu	1	59	13,7	4500	315000	5,2	normal
Atminah	1	79	13,2	11000	317000	5,8	normal
Ismaria	1	48	13,7	11000	317000	5,2	normal
Masyudah	1	59	14,2	8000	315000	5,5	normal
Tuji	1	69	10	11000	400000	4	ringan
Yusuf	2	54	8	16000	200000	4,5	berat
Adi Susanto	2	60	12,9	9000	250000	4,6	ringan
Abdi Walman	2	55	13,5	11000	300000	7	normal
Tri Joko	2	40	12,7	5200	184000	5,4	ringan
Paulina	1	56	10,5	11000	260000	5,6	ringan
Ompik	2	77	9	8800	252000	5	berat
Tutug	1	48	14,6	9600	312000	5,8	normal
Masyfufah	1	62	11,7	6200	400000	5,4	normal
Farida	1	71	11,3	5400	256000	6,3	normal
Amalia	1	48	10,1	5600	280000	5,5	ringan
alex	2	53	8,7	10600	136000	5,3	berat
Fadol	2	54	8	16000	201000	4,5	berat
Mukhlis	2	42	12,7	12600	208000	5,7	ringan
Sugiatno	2	70	10,5	5000	245000	5,4	ringan
Yanto Purnomo	2	49	14,6	5000	260000	4	normal
Arif Budi	2	26	13,1	11000	315000	4	normal
Wan Fiqih	2	65	10,7	8800	215000	6,3	ringan
Eko	2	49	12,5	7600	268000	5,1	ringan
Deni	2	43	13,2	8400	208000	5,4	normal
Sumarsih	1	53	11,5	6200	256000	4,6	normal
Nurul Hidayati	2	49	13,5	7600	252000	4	normal
Imam P.	2	33	14,7	7400	224000	6,4	normal
Zakfar	2	50	12,5	5600	245000	5,3	ringan
Agus	2	41	11,8	9000	280000	5,1	ringan
Tan Kim Nio	2	91	11,9	14800	224000	5	ringan
Fatimah	1	52	10,9	8400	415000	5,1	ringan
Suardi	2	39	13,3	8400	216000	5,2	normal
Ami Khasanah	1	49	12,2	4200	320000	5,6	normal
Tan Khi Hun	2	91	11,9	14800	224000	5	ringan
Dawam	2	61	7,1	14200	480000	4,9	berat
Arifin	2	67	13,8	9200	244000	6,4	normal
Won Fie Lan	1	95	12,3	9000	160000	5,4	normal
Ferdinan S	2	62	13,7	7200	244000	5,3	normal