

LAMPIRAN

Source code yang digunakan dalam matlab :

```
clc;
clear all;
syms t;

We=(0.04*exp(16*t)+01*exp(23*t)+1*exp(9*t)+0.9*exp(7*
t+1.5*t^2)+0.855*exp(71*t)+...

(0.92*exp(28*t+4*t^2+0.08)+0.08*exp(10*t)*(0.85*exp(3
8*t+5*t^2)+0.1*exp(40*t+6*t^2)+0.05*exp(45*t+8*t^2)))
*...

(0.96*exp(57*t)+0.04*exp(10*t))*(1.0*exp(112*t))*(0.9
4*exp(17*t)+0.06*exp(5*t))*(0.98*exp(t)+0.02*exp(t)*(
0.8*exp(2*t)+1*exp(t))*(1*exp(34*t))*(0.98*exp(2*t+0
.5*t^2)+0.02*exp(0.5*t)*(0.8*exp(30*t+4*t^2)+0.2*exp(
20*t+3*t^2)))*(0.95*exp(79*t))*(0.95*exp(3*t)+0.05*ex
p(t))*...

(0.95*exp(t)+0.05*exp(1.5*t))*(0.92*exp(t)+0.08*exp(2
*t))*(0.98*exp(t)+0.02*exp(1.5*t))*(0.95*exp(t)+0.05*
exp(1.5*t))*(0.96*exp(t)+0.04*exp(2*t))*(1*exp(2*t+0.
5*t^2))*(1*exp(3*t))*(0.98*exp(t)+0.02*exp(0.5*t)*(0.
8*exp(2*t)+0.2*exp(1.5*t)))/...
(1-
(0.1*exp(3*t)+0.05*exp(2*t)+0.2*exp(0.5*t)+0.04*exp(1
6*t)+0.1*exp(16*t)+0.1*exp(23*t)))+(0.005*exp(5*t)+0.1
*exp(3.5*t)+0.004*exp(19*t)+0.001*exp(26*t)+0.005*exp
(2.5*t)+0.002*exp(18*t)+0.0005*exp(25*t)+0.004*exp(16
.5*t)+0.001*exp(23.5*t))-...

(0.0005*exp(18.5*t)+0.00005*exp(25.5*t)+0.0002*exp(21
*t)+0.0005*exp(28*t)+0.0004*exp(19.5*t)+0.0001*exp(26
.5*t))+...
(0.00002*exp(21.5*t)+0.000005*exp(28.5*t)));
```

```
Pe=subs(We,t,0)
Me=We/Pe
dMe=diff(Me)
dMe0=subs(dMe,t,0)
dMe2=diff(dMe)
dMe20=subs(dMe2,t,0)
```



Screenshot tampilan source code :

```

1 - clear all;
2 -
3 -
4 -
5 - Me = (0.04*exp(1.6*t)+0.1*exp(2.3*t)+1*exp(9*t)+0.9*exp(7*t+1.5*t^2)+0.855*exp(71*t))*...
6 - (0.92*exp(28*t+4*t^2+0.08)+0.08*exp(10*t)+0.85*exp(38*t+5*t^2)+0.1*exp(40*t+6*t^2)+0.05*exp(45*t+8*t^2))*...
7 - (0.96*exp(57*t)+0.04*exp(10*t))* (1.0*exp(112*t))* (0.94*exp(17*t)+0.06*exp(5*t))* (0.98*exp(t)+0.02*exp(t))*...
8 - (0.8*exp(2*t)+1*exp(t))* (1*exp(34*t))* (0.98*exp(2*t+0.5*t^2)+0.02*exp(0.5*t))*...
9 - (0.8*exp(30*t+4*t^2)+0.2*exp(20*t+3*t^2))*...
10 - (0.95*exp(79*t))* (0.95*exp(3*t)+0.05*exp(t))*...
11 - (0.95*exp(t)+0.05*exp(1.5*t))* (0.92*exp(t)+0.08*exp(2*t))* (0.98*exp(t)+0.02*exp(1.5*t))* (0.95*exp(t)+0.05*exp(1.5*t))*...
12 - (0.96*exp(t)+0.04*exp(2*t))* (1*exp(2*t+0.5*t^2))*...
13 - (1*exp(3*t))* (0.98*exp(t)+0.02*exp(0.5*t))* (0.8*exp(2*t)+0.2*exp(1.5*t))*...
14 - (1-(0.1*exp(3*t)+0.05*exp(2*t)+0.2*exp(0.5*t)+0.04*exp(1.6*t)+0.1*exp(1.6*t)+0.1*exp(2.3*t)))+...
15 - (0.005*exp(5*t)+0.1*exp(3.5*t)+0.004*exp(19*t)+0.001*exp(26*t)+0.005*exp(2.5*t))+...
16 - (0.002*exp(18*t)+0.0005*exp(25*t)+0.004*exp(16.5*t)+0.001*exp(23.5*t))*...
17 - (0.0005*exp(18.5*t)+0.00005*exp(25.5*t)+0.0002*exp(21*t)+0.0005*exp(28*t)+0.0004*exp(19.5*t)+0.0001*exp(26.5*t))*...
18 - (0.00002*exp(21.5*t)+0.000005*exp(28.5*t))*...
19 -
20 -
21 - Pe = subs(Me,t,0)
22 - Me = Me/Pe
23 - dMe = diff(Me)
24 - dMe0 = subs(dMe,t,0)
25 - dMe2 = diff(dMe)
26 - dMe20 = subs(dMe2,t,0)

```

Screenshot tampilan hasil turunan pertama dan dimasukan (t=0) :

```

Command History | Current Folder
Pe =
    9.1327

Me =
(281474976710656*(exp(9*t) + exp(16*t))/25 + exp(23*t) + (171*exp(71*t))/200 + (9*exp((3*t^2)/2 + 7*t))/10 + (19*exp(228*t)*exp(t^2/2 + 2

dMe =
(281474976710656*(9*exp(9*t) + (16*exp(16*t))/25 + 23*exp(23*t) + (12141*exp(71*t))/200 + (9*exp((3*t^2)/2 + 7*t)*(3*t + 7))/10 + 1.083*

dMe0 =
    103.4437

dMe2 =
(281474976710656*(81*exp(9*t) + (256*exp(16*t))/25 + 529*exp(23*t) + (862011*exp(71*t))/200 + 127*exp((3*t^2)/2 + 7*t))/10 + (9*exp((3*t

dMe20 =
    2.8519e+004

fx >>

```