Editor - C:\Users\Emmanuel Nwaohiri\AppData\Local\Microsoft\Windows\INetCache\IE\I9LWRHEV\solve1.m

emeka_12.m | mexish.m | emeka_test.m | emeka_test2.m | solve1.m

```
1 -    clearvars
2 -    clc
3 -    close all
4 -    t = 0:0.5:7.5;
5 -    y = 0.0769*exp(-t/40)-(2000*1601^(1/2)*cos(t + atan(1/40)))/1601 + 2000
6 -    plot(y,t)
7 -    xlabel('Time (hr)')
8 -    ylabel('Amount of substance (g)')
9 -    grid on
10 -   grid minor
```

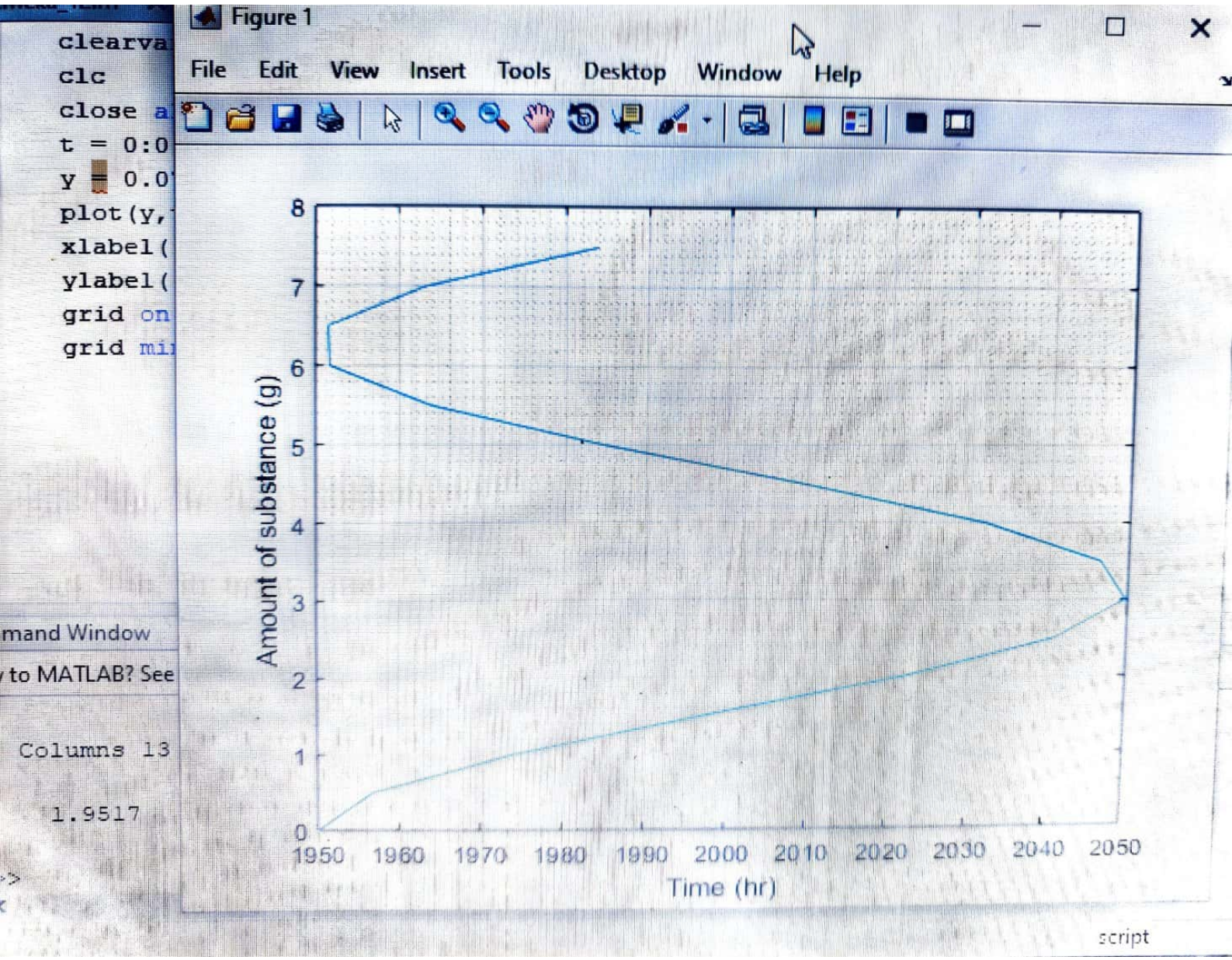
Command Window

New to MATLAB? See resources for Getting Started.

```
  Columns 13 through 16

    1.9817    1.9815    1.9832    1.9839

fx >>
```



AppData ▸ Local ▸ Microsoft ▸ Windows ▸ INetCache ▸ IE ▸ I9LWRHEV

Editor - C:\Users\Emmanuel Nwaohiri\AppData\Local\Microsoft\Windows\INetCache\IE\I9LWRHEV\solve2.m

emeka_12.m | mexish.m | emeka_test.m | emeka_test2.m | solve1.m | solve2.m

```
1 -    clc
2 -    close all
3 -    clearvars
4 -    t = 0:1:500;
5 -    x =((1000)+(49.88)*(sin(t))+(2.49)*(cos(t))-802.49*exp(-0.05*t));
6 -    plot(t,x)
7 -    xlabel('Time (hr)')
8 -    ylabel('Amount of substance present (g)')
9 -    hold on
10 -   y = (1000-800*exp(-0.05*t));
11 -   plot(t,y)
12 -   xlabel('Time (hr)')
13 -   ylabel('Amount of substance present (g)')
14 -   hold off
15 -   grid on
16 -   grid minor
```

Command Window

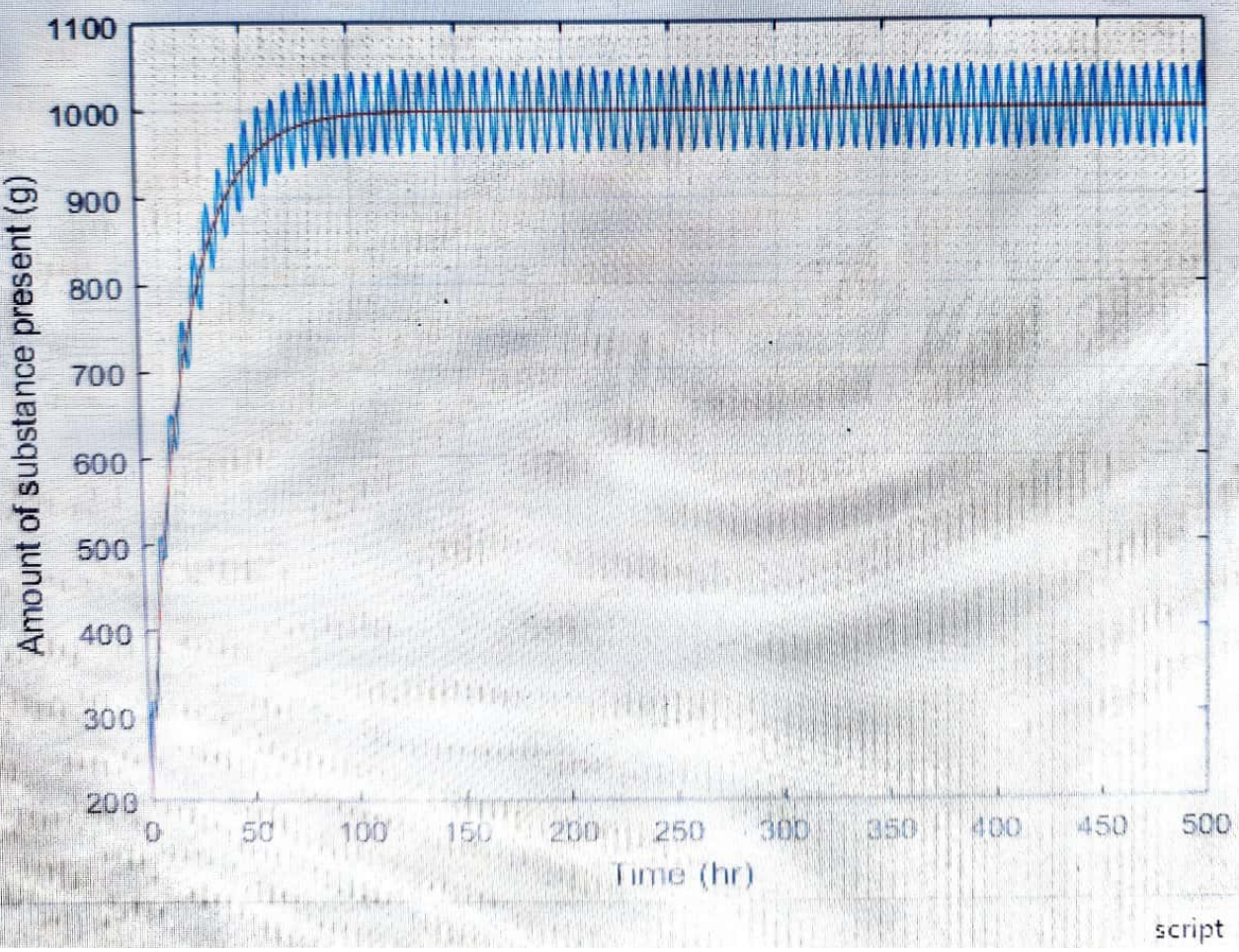
```
clc
close all
clearvars
t = 0:1:5
x =((1000
plot(t,x)
xlabel('T
ylabel('A
hold on
y = (1000
plot(t,y)
xlabel('T
ylabel('A
hold off
grid on
grid mino
```

and Window

MATLAB? See res

Figure 1

File Edit View Insert Tools Desktop Window Help



script

EDIT BREAKPOINTS RUN

AppData ▸ Local ▸ Microsoft ▸ Windows ▸ INetCache ▸ IE ▸ I9LWRHEV

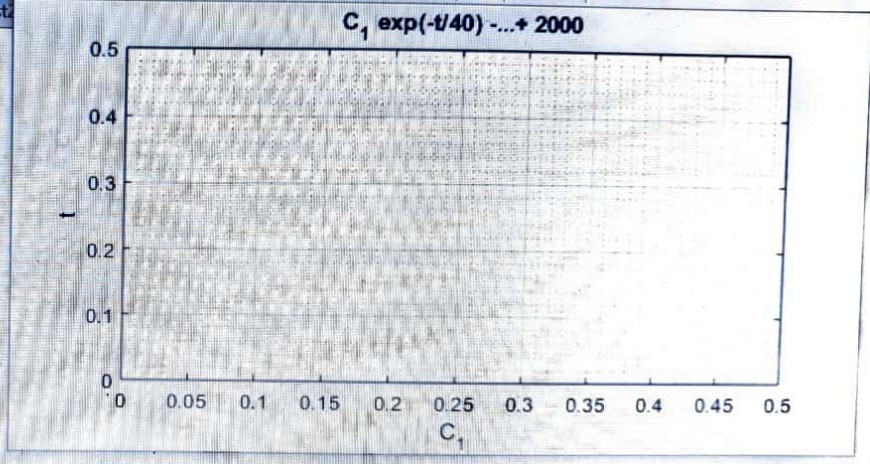
Editor - C:\Users\Emmanuel Nwaohiri\AppData\Local\Microsoft\Windo

emeka_12.m | mexish.m | emeka_test.m | emeka_test2

```
1 -  clc
2 -  close all
3 -  clearvars
4 -  y=dsolve('Dy=50*(1+sin(t))-0.025*y','t')
5 -  t=(0:0.5:7.5)
6 -  ezplot(y,t)
7 -  grid on
8 -  grid minor
```

Figure 1

File Edit View Insert Tools Desktop Window Help



Command Window

New to MATLAB? See resources for Getting Started.

```
    Columns 13 through 16

    6.0000    6.5000    7.0000    7.5000

>>
```

script Ln 4 Col 27

Editor - C:\Users\Emmanuel Nwaohiri\AppData\Local\Microsoft\Windows\INetCache\IE\I9LWRHEV\solve4.m

emeka_12.m | mexish.m | emeka_test.m | emeka_test2.m | solve1.m | solve2.m | solve3.m | solve4.m

```
1 -  clc
2 -  close all
3 -  clearvars
4 -  b=0:1:500;
5 -  tstep = rem(b,2)==0
6 -  t = 0:tstep:500;
7 -  x =((1000)+(49.88)*(sin(t))+(2.49)*(cos(t))-802.49*exp(-0.05*t));
8 -  plot(t,x)
9 -  xlabel('Time (hr)')
10 - ylabel('Amount of substance present (g)')
11 - grid on
12 - grid minor
```

Command Window

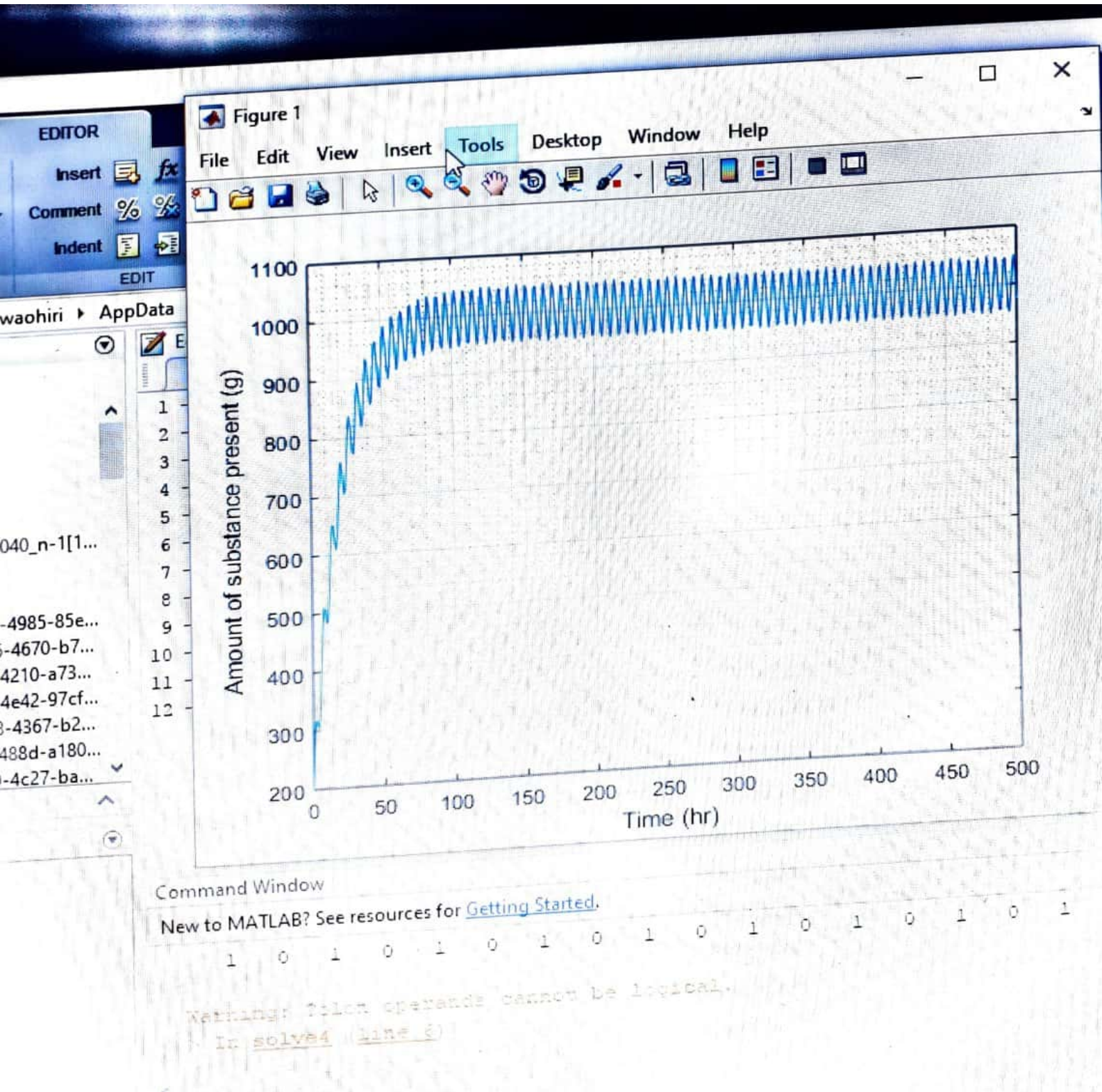
New to MATLAB? See resources for Getting Started.

```
     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1

Warning: Colon operands cannot be logical.
> In solve4 (line 6)

>>
```

script



Local ▸ Microsoft ▸ Windows ▸ INetCache ▸ IE ▸ I9LWRHEV

Editor - C:\Users\Emmanuel Nwaohiri\AppData\Local\Microsoft\Windows\INetCache\IE\I9LWRHEV\solve5.m

emeka_12.m | mexish.m | emeka_test.m | emeka_test2.m | solve1.m | solve2.m | solve3.m

```
1 -    clc
2 -    close all
3 -    clear vars
4 -    y=dsolve('Dy=50*(1+sin(t))-0.025*y','t')
```

Command Window

New to MATLAB? See resources for Getting Started.

```
y =

C1*exp(-t/40) - (2000*1601^(1/2)*cos(t + atan(1/40)))/1601 + 2000

fx >>
```