Initial temp (IT) = 10°c

Second temp (ST) = 20°c

Actual " (AT) = 25°c

" (cT) = 24.9°c

Time from IT to ST = 5mins = 300

2 Time (2T) = ??

If from IT to ST = 20°c − 10°c = 10°c

and it takes 5mins to cover 10°c

5°c = ½ of 5mins

= 5°c = 2.5mins (to move from 20°c to 25°c)

25°c = 2.5m

24.9°c = ?

$= \frac{2.5 \times 24.9}{2.5}$ [2.5mins = 150 sec]

$= \frac{150 \times 24.9}{25}$ $= 6 \times 24.9 = 149.4$

$\therefore 149.4 \doteq 60$

= 2.49 = 2mins 49secs

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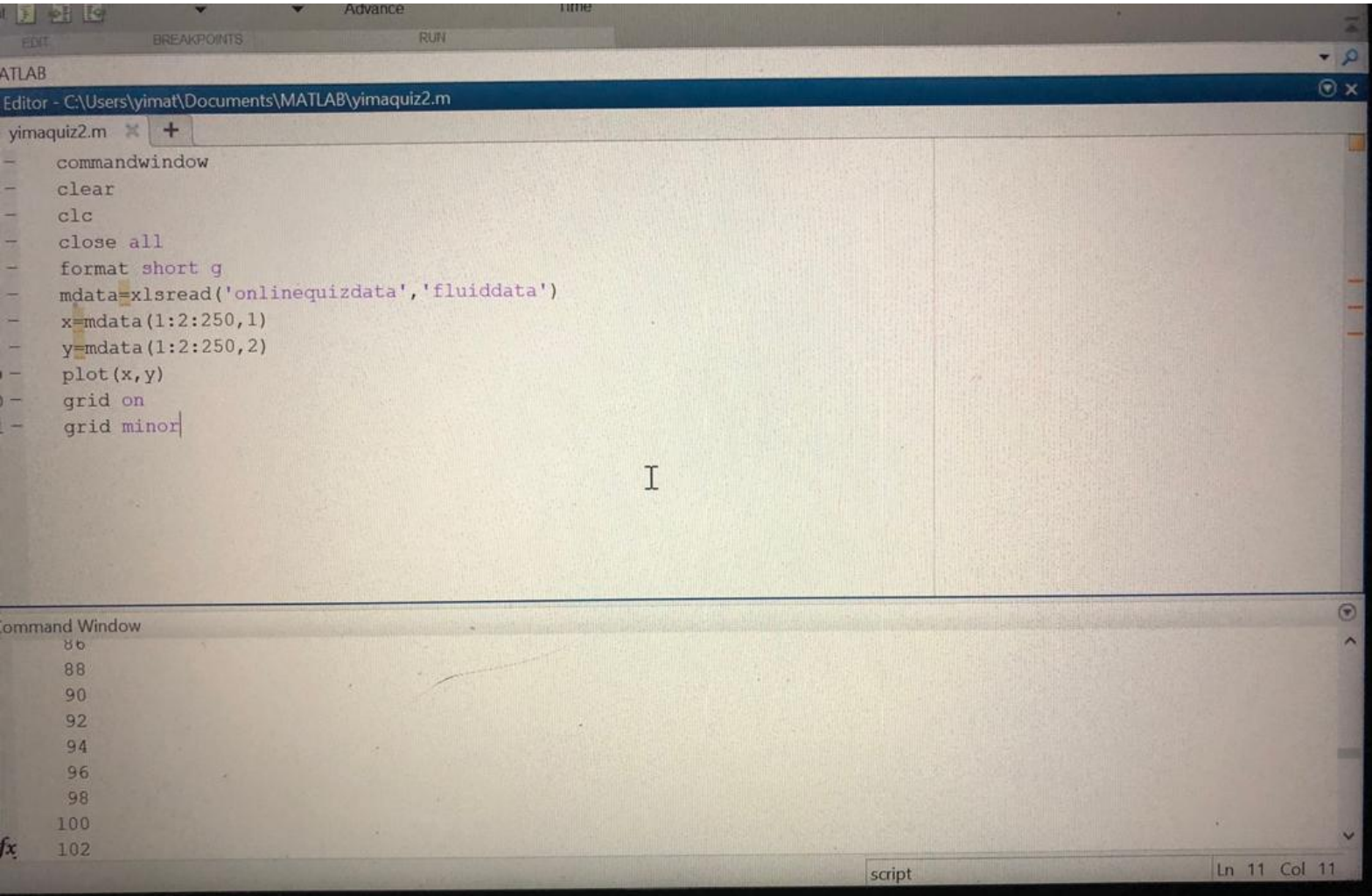
19/ENG04/065
Elect / Elect
ENG 282

i) T_1 of thermometer = 10°C
T_2 " " = 20°C
Time taken = 5mins = 300secs
$\Delta T = 20 - 10 = 10°C$
Final $T = 24.9°C$ $\Delta T_2 = 24.9 - 10 = 14.9°C$
$10x = 300 \times 14.9$
$10x = 4470$
$x = \frac{4470}{10} = 447$ secs
$x = 7$mins. 27secs


Advance
Time
EDIT
BREAKPOINTS
RUN
ATLAB
Editor - C:\Users\yimat\Documents\MATLAB\yimaquiz2.m
yimaquiz2.m
commandwindow
clear
clc
close all
format short g
mdata=xlsread('onlinequizdata','fluiddata')
x=mdata(1:2:250,1)
y=mdata(1:2:250,2)
plot(x,y)
grid on
grid minor
Command Window
86
88
90
92
94
96
98
100
102
script
Ln 11 Col 11

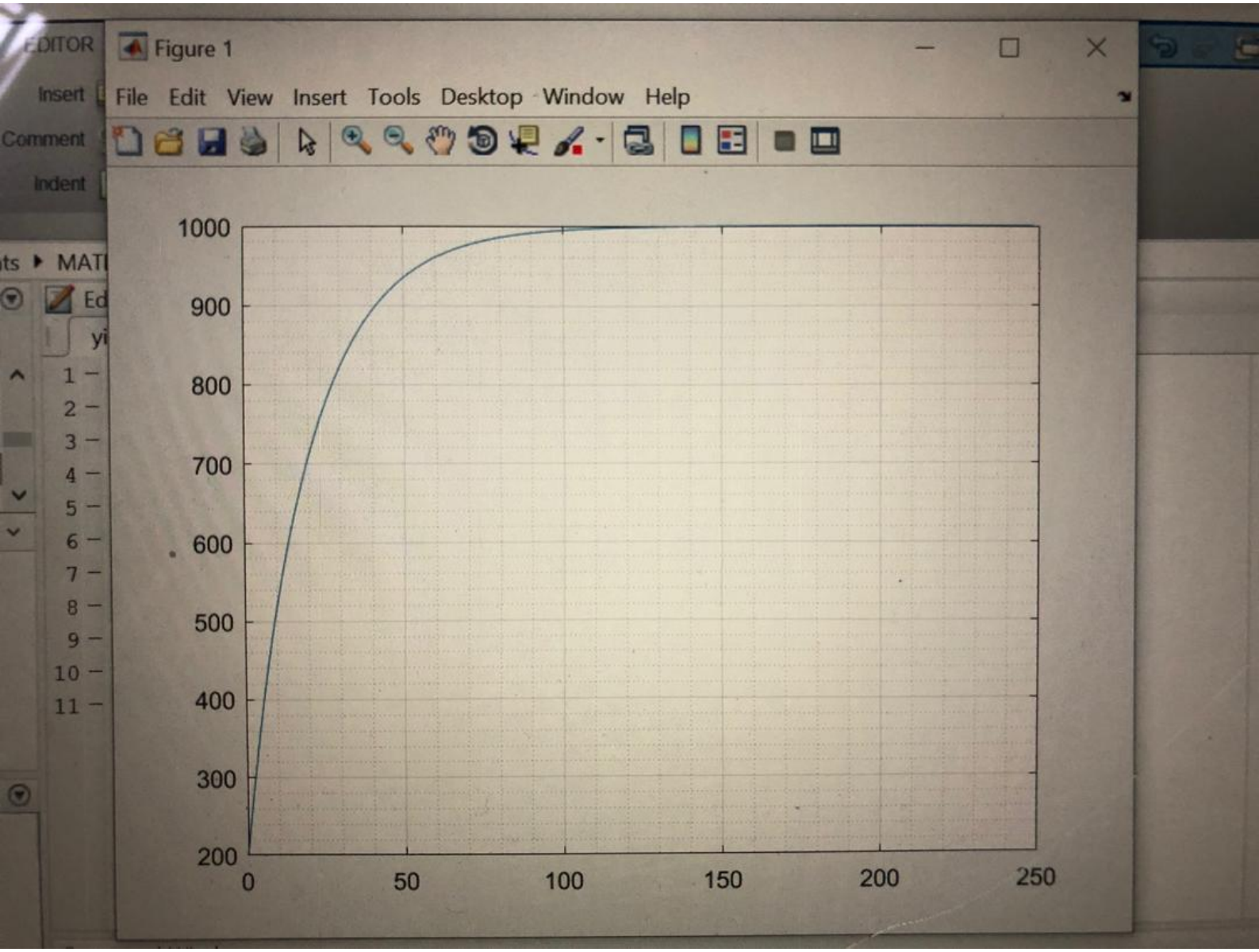


Figure 1
File Edit View Insert Tools Desktop Window Help
1000
900
800
700
600
500
400
300
200
0
50
100
150
200
250