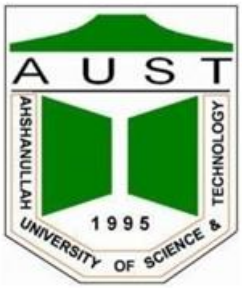

AHSANULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

DEPARTMENT
OF
ELECTRICAL AND ELECTRONIC ENGINEERING

LAB REPORT

COURSE NO	: EEE 2226
COURSE NAME	: Numerical Technique Laboratory
EXPERIMENT NO	: 04
DATE OF SUBMISSION	: 22/07/2025

Submitted by :

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ID	: 20230105206
Year	: 2nd
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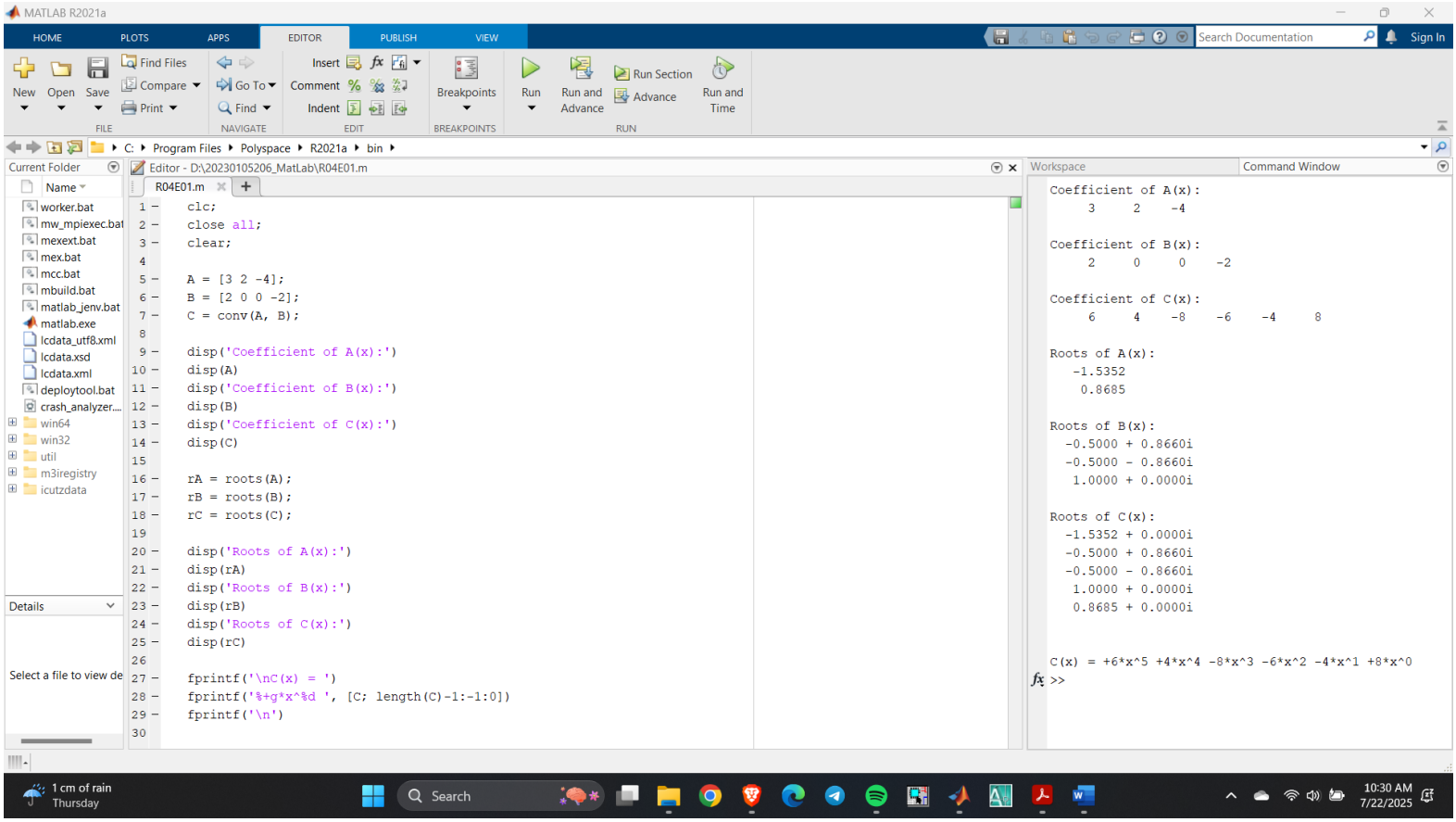
Section	: D(2)

#Exercise 1:

Construct a polynomial such that C(x)= A(x)*B(x)
Where A(x)= $3x^2+2x-4$ and B(x)= $2x^3-2$
Also find the roots of A(x), B(x) and C(x).

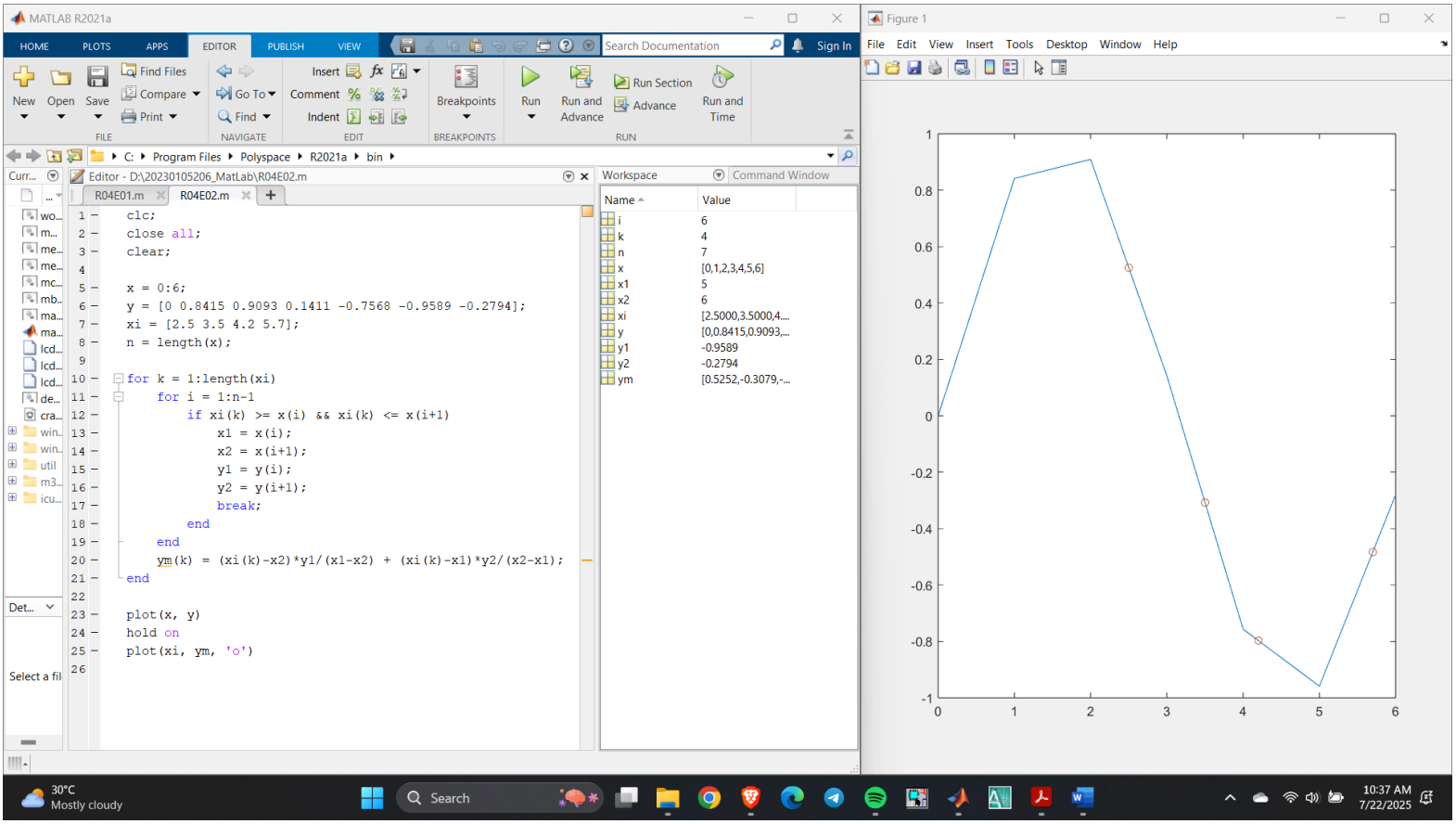


#Exercise 2.

Plot the curve corresponding to table1 using linear interpolation.

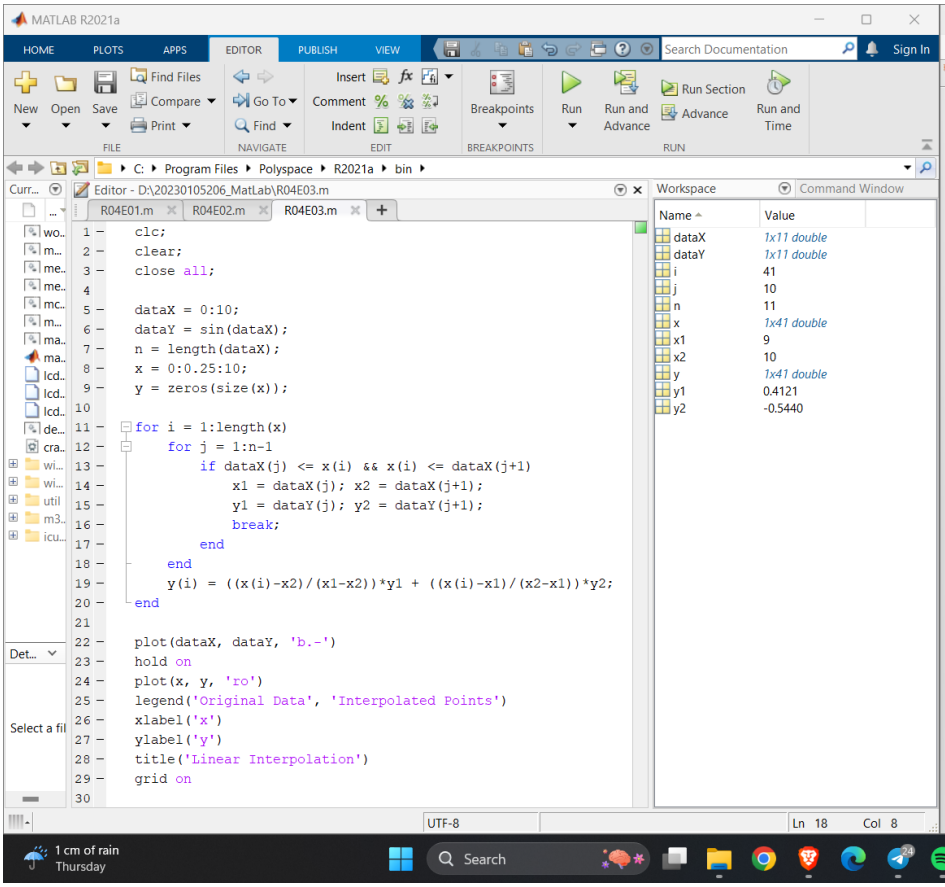
Table 1

x	*f(x)*
0	0
1	0.8415
2	0.9093
3	0.1411
4	-0.7568
5	-0.9589
6	-0.2794



#Exercise 3.

$y = \sin(x); x = 0:10; x(i) = 0:0.25:10;$ Construct the interpolant y and plot.



#Exercise 4.

Write a MATLAB program implementing Lagrange Polynomial.

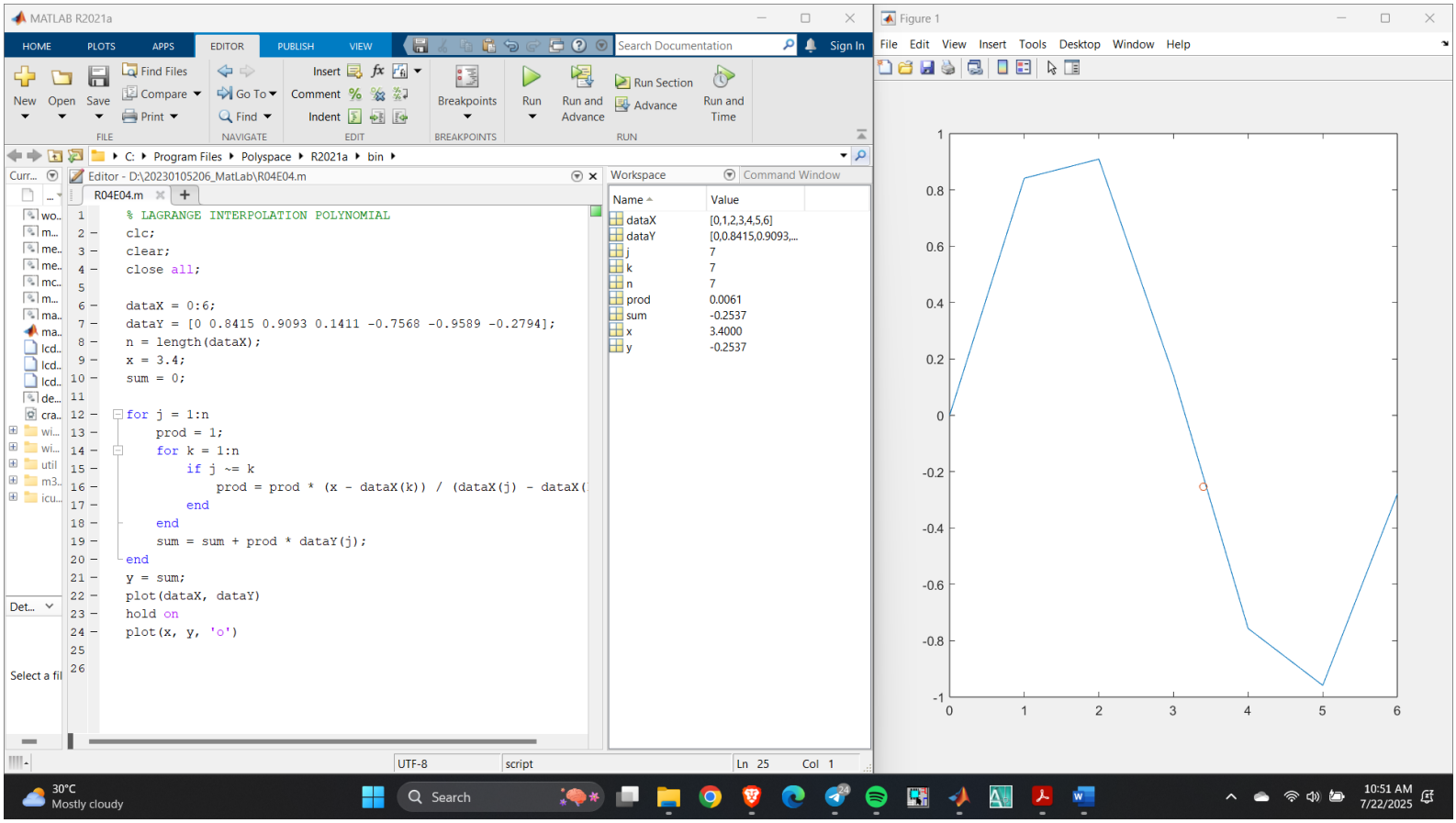
#Exercise 5.

Construct a Lagrange interpolating polynomials for the data points given in table 1.

Table 1

x	*f(x)*
0	0
1	0.8415
2	0.9093
3	0.1411
4	-0.7568
5	-0.9589
6	-0.2794

Taking random value X=3.4;



some random values of x (here x = [2.5 3 3.5 4 4.5] is taken)