Advanced Statistics (DS2003) BDS-4A, 4B, 4C Spring 2025

Assignment-3: CLO-4

Instructions:

- This assignment comprises the following questions, and each question carries 20 marks.
- You are required to upload a scanned copy of your assignment, in a single PDF format, over the Google classroom by 11:00 pm on 29-04-2025
- You are also required to submit the hard copy of your assignment completed over A4 or assignment papers ONLY.
- o For sections A and C, a hard copy is due on Wednesday (30-04-2025) during the class.
- o For section B, a hard copy is due on Tuesday (29-04-2025) during the class.

Consider the datasets given in end problems **12.11**, **12.12**, **12.14**, **12.56**, and **12.57** of the reference book. For each dataset, perform the following tasks by using MATLAB:

- 1. Determine a multiple linear regression model
- 2. Perform individual variable screening using T-test

You can use the *MulReg.m* file, a MATLAB function uploaded over Google Classroom, to acquire the parameters which are required to perform the above-mentioned tasks. Submission of the datasets and MATLAB codes is not required.