Maulana Azad National Institute of Technology, Bhopal

Department of Computer Science and Engineering

Date:	27-Jan-2023	Session:	Jan-May 2023
Branch:	M.Tech. (AI)	Semester:	II
Subject Code:	AI 525	Subject:	Deep Learning Lab
Faculty Name: Dr. Nilay Khare / Ashwini Kumar Malviya			

Lab Assignment 4:   **Deadline: 5:00PM 02-Feb-2023 (Thursday)**

1) Write a python program to find the suitable **linear regression** lines using **least square method** for the given datasets in "**datasets_lab4.csv**."

   a) Implement the function for least square method that can process several features for finding linear regression line.

   b) Implement the functions to find the Mean Square Error (MSE), R-square, and Standard Error (SE).

   c) Implement a function to check homoscedasticity.

Submission Guidelines:

1) Before submission ensure that:

   a) There should be **no plagiarism in the code**. If found then 0 marks will be assigned for that assignment.

   b) The assignment should be submitted within the allotted **time limit**.

2) Create a single pdf/word file which contains the following:

   a) Scholar number and name of the scholar.

   b) Lab Assignment number and date of the assignment.

   c) Implementation code of all the tasks in the assignment.

d) Result/Screenshot of the implemented code on test data.

e) Remarks/Explanation of the code, if required.

3) Submit the pdf/word file by sending the email at the address *"ai525dl.manit@gmail.com"* with the subject "**<Scholar No.> Lab #4**".