

Maulana Azad National Institute of Technology, Bhopal

Department of Computer Science and Engineering

Date:	20-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 3:

Deadline: 5:00PM 25-Jan-2023 (Wednesday)

1) Plot the curves/planes on python for the given expressions mentioned below:

a) $f(x) = 2.4$

b) $f(x) = 3x + 5$

c) $f(x) = -2.5x + 10$

d) $f(x) = x + 11$

e) *Write a function to check whether the point $(-1, 3)$ is bounded with in the area enclosed by the curves of a), b), c) and d).*

f) $f(x) = 6x^2 - 5x + 2$

g) $f(x) = x^3 - 2x^2 - 1$

h) $f(x) = 4x^3 + x^2 - 3x + 5$

i) *Check whether the point $(0, 3)$ is bounded with in the area enclosed by the curves of f) and h).*

j) $f(x, y) = x + y + xy + 3$

k) $f(x, y) = 3.5xy + 2x^2 + 9y$

l) $f(x, y) = x^2y + 3xy - 7y^2 + 2.3$

m) $f(x, y) = 5xy + 2$

n) $f(x, y) = [(5xy) / (e ^ { x^2 + y^2 })] + 2$

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 #3**”.