**T AND T- LAB-SESSIONAL EXAM**

**BRANCH-IT-5**

**TIME-1.30 HR**

1-Problem Statement:

You are given a CSV file containing data on the performance of students in an online course. Your task is to analyze the data and answer the following questions:

1. Display the average score of each quiz?
2. Display the average score of each student?
3. Display which quiz had the highest average score?
4. Display top 20 student had the highest average score?
5. How many students passed the course? (assuming passing grade is 60%)
6. The scenario is you are a HR officer, you got a candidate with 5 years of experience. Then what is the best salary you should offer to him?”

Dataset: the table contains all values in csv file (salary.csv)

X: the first column which contains Years Experience array.

Y: the last column which contains Salary array.

Implement linear regression in python for a candidate with 5 years experience.

1. Write a NumPy program that takes a list of numbers as input and returns a diagonal matrix using the input numbers without using the built-in NumPy function np.diag().

4.write a python program to get number of occurrences of a word in a sentence. (Input the sentence through keyboard)