MES Wadia College of Engineering Pune-01

Department of Computer Engineering

Name of Student:	**Class:**
Semester/Year:	**Roll No:**
Date of Performance:	**Date of Submission:**
Examined By:	**Experiment No: Part A-03**

PART: A) ASSIGNMENT NO: 03

Title: Descriptive Statistics - Measures of Central Tendency and variability

Perform the following operations on any open source dataset (e.g., data.csv)

1. Provide summary statistics (mean, median, minimum, maximum, standard deviation) for a dataset (age, income etc.) with numeric variables grouped by one of the qualitative (categorical) variable. For example, if your categorical variable is age groups and quantitative variable is income, then provide summary statistics of income grouped by the age groups. Create a list that contains a numeric value for each response to the categorical variable.

2. Write a Python program to display some basic statistical details like percentile, mean, standard deviation etc. of the species of 'Iris-setosa', 'Iris-versicolor' and 'Iris-versicolor' of iris.csv dataset.

Provide the codes with outputs and explain everything that you do in this step.

OBJECTIVES:

- Students should be able to perform the Statistical operations using Python on any open source dataset.

PREREQUISITE:

- Basic of Python Programming
- Concept of statistics such as means, median, minimum, maximum, standard deviation etc.

APPRATUS:

- Programming Language: Python
- Open source dataset (e.g., data.csv)

CONCLUSION:

QUESTIONS:

1. What is Statistics? Explain
2. Explain Measures of Central Tendency with examples.
3. What are the different types of variables? Explain with examples.
4. Which method is used to display statistics of the data frame? Write the code.