

## PARULINSTITUTE OF TECHNOLOGY FACULTY OF ENGINEERING & TECHNOLOGY PARUL UNIVERSITY

PIT, Vadodara

## Assignment-2\_DADV

- Q.1 Discuss why Python is a preferred language for data analysis and statistical computing. Include at least three key features of Python that make it suitable for these purposes.
- Q.2 Write a Python script to load a dataset from a CSV file, and display the first five rows of the dataset. (Assume the dataset file is named data.csv).
- Q.3 Define and explain the importance of the measures of central tendency (mean, median, mode) and measures of dispersion (range, variance, standard deviation).
- Q.4 Calculate the mean, median, mode, variance, and standard deviation for the following dataset:

4,8,6,5,3,8,9,10,6,74, 8, 6, 5, 3, 8, 9, 10, 6, 74,8,6,5,3,8,9,10,6,7

Q.5 Differentiate between population variance and sample variance. Why is it important to distinguish between the two?

Note: Submit the assignment on or before 20/07/2024.

Date:13/07/2024 Dr. Vinod Patidar
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