FIVE –DAY WORKSHOP ON

DATA ANALYSIS USING PYTHON

(5th~10th JANUARY, 2023)

Organized by

Department of Mathematics & Statistics

REPORT

A Five-Day Workshop **"Data Analysis using Python"** was organised by the Department of Mathematics and Statistics from 5th to 10th January, 2023. The Resource Person is **Dr. P. Siva Kumar,** Associate Professor, Department of CSE, KL University, Vaddeswaram, India. The workshop was organized with the objective of promoting the awareness and skills among the 2nd B.Sc Statistics students about Python Programming and its applications.
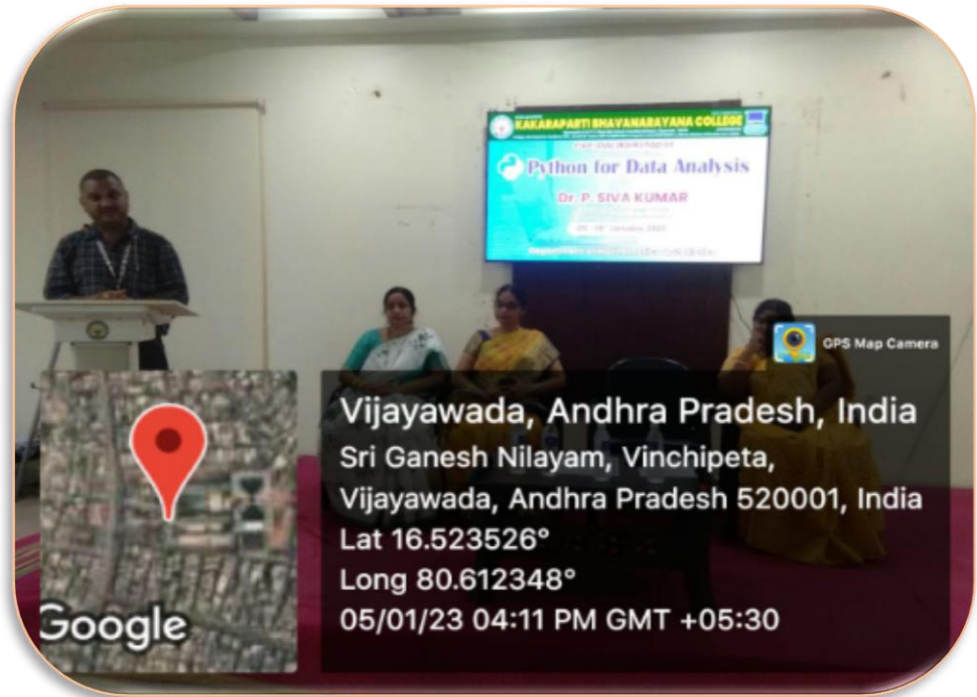
Objectives:

❖ To provide students with the basic concept of python, its syntax, functions and packages.

❖ To enable the students to write scripts for data manipulation and analysis.

❖ To develops skills of writing and running a code using python.

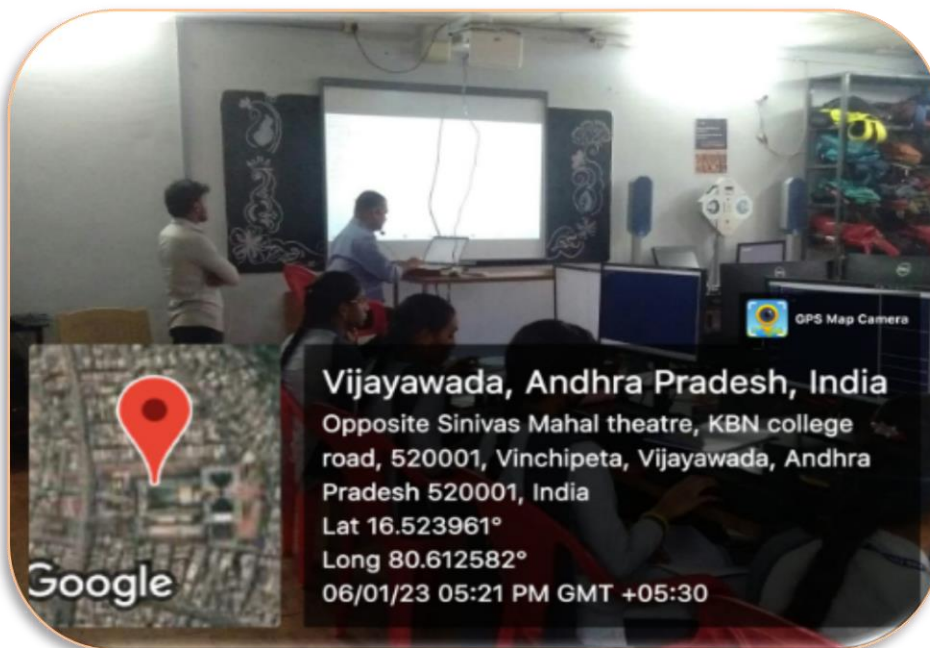❖ Students should be able to write short scripts to import, prepare and analyze data.

The workshop resource person initially focused on introduction to python, its features and applications. The students got a chance to learn python data types, operators, control structures, functions, data structures, modules, packages, oops concepts, files, libraries of Data science thoroughly. Meanwhile the queries raised by the students were also answered in an efficient way in all the sessions by the resource persons.

The workshop participants were able to successfully code and run their programs. The workshop turned out to be a major successful event, imparting lot of knowledge about python programming and how to solve simple problems with python programming.
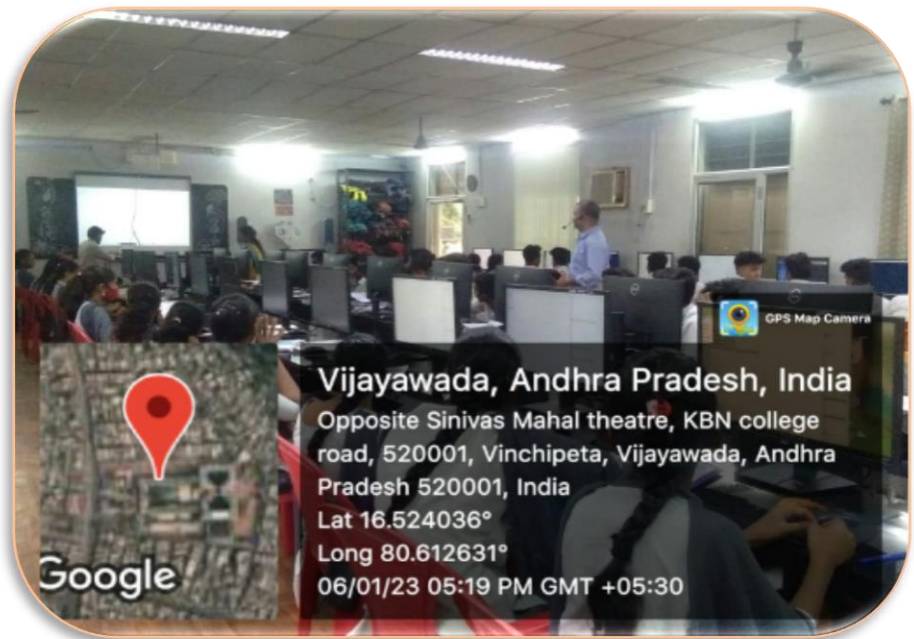
DAY 1:

- **Introduction to python and how to install the python was clearly explained.**
- **Applications of python in place of C and Java**
- **How to write a Program in python and explain about operators like arithmetic, Comparison, assignment, logical and bitwise operators.**
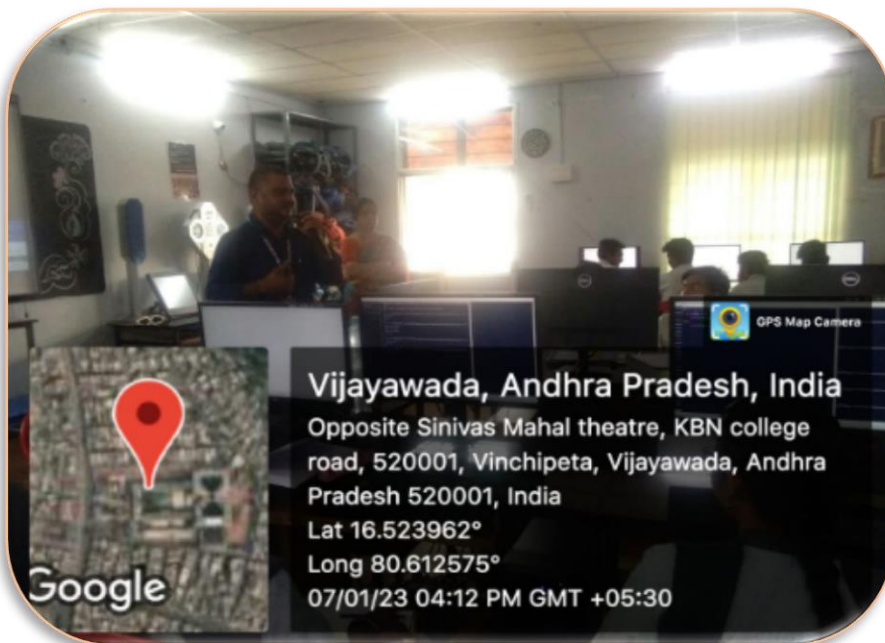

DAY 2

- **Explained about membership and identity operators, conditional statements.**
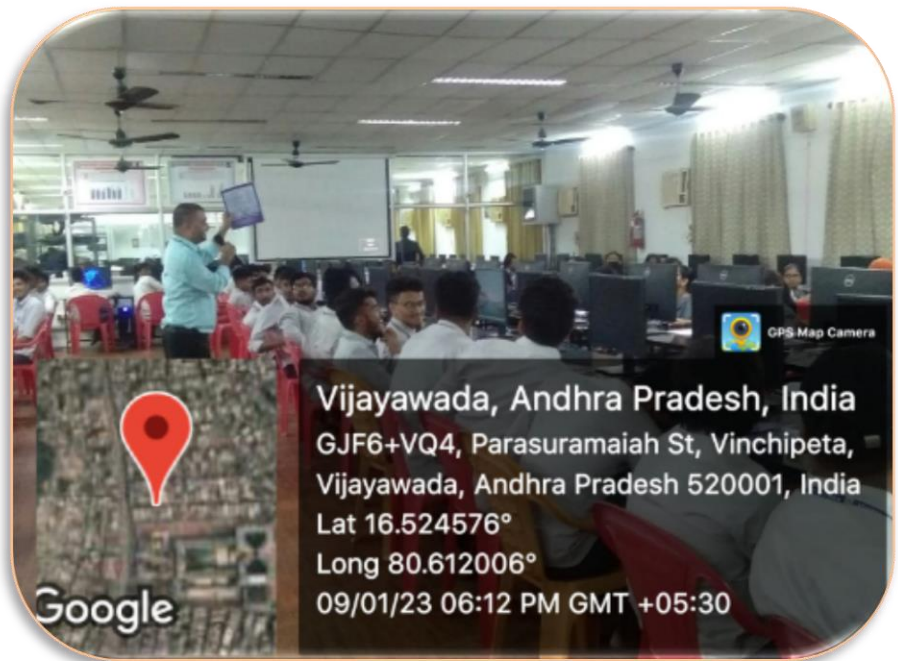- **Writing a python program using if, else if and nested if statements.**

DAY 3:

- **Explained about iterative statements and how to write a python program using While loop and for loop was clearly explained.**
- **How to write a logic using iterative Statements in python.**
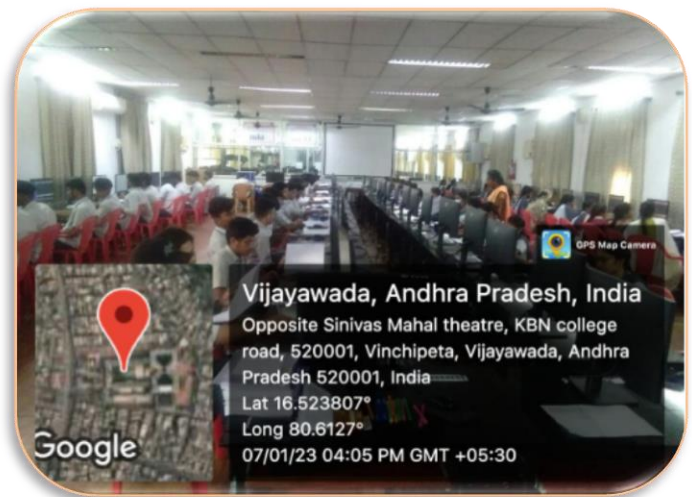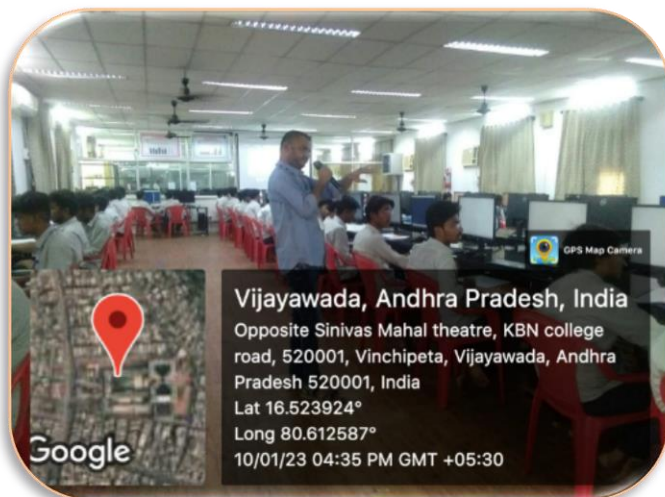- **Introduction to a string in python and slice operator.**

DAY 4

- **Explained about the how to write a python program using the slice operator.**
- **List data type in python and what are the operations done in list data type.**

DAY 5

- **Explained about tuples and what is the difference between the list and tuple and how to covert a tuple into a list and also explain about dictionary and statistical methods in python.**
- **How to create a project using the python and how data was connected from the online.**

The Outcome of Python Programming workshop:

- **Introduction to Python**
- **Python features and applications**
- **Data types, Operators**

- **Functions, recursion**

- **File handling**

- **OOPs concepts**

- **Modules and Packages**

- **Libraries used for Data Science.**

INVITATION