

**SARDAR VALLABHBHAI NATIONAL INSTITUTE OF TECHNOLOGY,
SURAT**

COMPUTER SCIENCE AND ENGINEERING

DEPARTMENT B. Tech-1st Year

(Even Semester- 2023-2024)

Subject – Web Programming (CS104)

Python Lab Assignment 14 – Inheritance and Polymorphism

1. Write a python programs that illustrate how the following forms of inheritance are supported:
 - a. Single inheritance
 - b. Multiple inheritance
 - c. Multilevel inheritance
 - d. Hierarchical inheritance
2. Write a python program calculates the percentage of a student using multilevel inheritance.
 - a. (Enter Marks for 5 Subjects: Maths:--, Chem:--, Phy:--, WP:--, DS:-- , b. Percentage of a student : —)
3. Write a Python program to create a class Vehicle, Twowheeler and Fourwheeler. Then, derive classes Car and Scooter from it to illustrate the multiple inheritance.
4. Write a python program to illustrate polymorphism using this example.
 - 1. Details: Car x1 Red 20000**
Car max speed is 240
Car change 7 gear
 - 2. Details: Truck x1 white 75000**
Vehicle max speed is 150
Vehicle change 6 gear
5. Write a python program to create two classes CAT and DOG . They share a similar structure and have the same method names Info() and Make_sound().