# WEEKLY TEST - 8

1. Define class and object. Note all the basic terminologies with clear explanation of each.

2. Explain about the concept of inheritance and list out all the different types of inheritance along explaining each and every type.

3. Explain the use case of super() with the basic example using same method names in different class.

4. Create a class with the name sample and define constructor to take two values. Define three methods with the names addition, subtraction ,multiplication and perform actions, return the values in their respective methods.

5. Create a class with the name abc, Define a constructor class which will take a single value. Create two methods with the names factorial and prime_number and perform the actions, Print the result values inside the methods.

6. Develop a Python program that demonstrates single inheritance, focusing on a class hierarchy for handling personal information. The program should include two classes: dob (date of birth) and details. The dob class should contain attributes for the day, month, and year of birth, while the details class should inherit from dob and additionally include attributes for name and age.

The objective is to create instances of the details class and showcase the inheritance relationship by utilizing the properties of the base class (dob). The program should enable the creation of objects with personal information and provide a method (display) to print out the collected details.

7. Define three classes, College, CSE inherits AIML classes where CSE class consists of constructor takes studentid and studentname and a display method which prints all the details including college name and location. where MECH class have a constructor which takes studentid and student name and a display method which prints all the details including college name and location. Where College class have default college name and college location

8.Define two classes, Public_details and Private_details, both inheriting from the Employee class through single inheritance. Each derived class extends the basic employee information with specific details relevant to public and private aspects, such as salary and experience for public details, and Snapchatid and instaid for private details. Program should have two display methods one in Private and another one in public class to print all the details.

9. Define three classes, Vehicle, Motor and Car, Motor inherits Car class where car class consists of constructor takes name,motor type and model.

where Motor class have a constructor which takes motor type value from car class. Vehicle class have constructor which takes model from motor class and includes function display which display all the details of a vehicle.