

LAB-6

NOTE: Share screenshots of results as well. Also, output to each question should start with the time of execution which should be clearly visible in the screenshot.

In case of any doubt, contact the following TAs:

For Q1- Geet (20pcso04)

For Q2- Shefali (21pcso08)

For Q3- Anubhav (21mcsa03)

For Q4- Aryan (21mcsa04)

Q.1 Create a class named 'Member' having the following members:

Data members

1 - Name

2 - Age

3 - Phone number

4 - Address

5 - Salary

It also has a method named 'printSalary' which prints the salary of the members.

'Employee' class inherits the 'Member' class. The 'Employee' class have data members 'specialization' and 'department' respectively. Now, assign name, age, phone number, address and salary to an employee by making an object of this class and print the same.

Q.2 Create a class named 'Rectangle' with two data members 'length' and 'breadth' and two methods to print the area and perimeter of the rectangle respectively. Its constructor having parameters for length and breadth is used to initialize length and breadth of the rectangle. Let class 'Square' inherit the 'Rectangle' class with its constructor having a

parameter for its side (suppose s) calling the constructor of its parent class as 'super(s,s)'. Print the area and perimeter of a rectangle and a square.

Q.3

Create a class with name as base which has print() method and this method print("Base")

Create another class with name Derived which extends base class and this class contains method name as print() which print("Derived")

Finally construct a class with name as Main which contains Doprnt as a method which has argument of type Base class and this method call the print method as

Obj.print()

This class has will contain static void main function in which 3 obj will be created as:

Base x= new Base()

Derived y = new Derived()

Derived z = new Derived ()

Doprnt(x)

Doprnt (y)

Doprnt(z)

Output will be

Base

Derived

Derived

Q. 4 Create a class named 'Shape' with a method to print "This is This is shape". Then create two other classes named 'Rectangle', 'Circle' inheriting the Shape class, both having a method to print "This is rectangular shape" and "This is circular shape" respectively. Create a subclass 'Square' of 'Rectangle' having a method to print "Square is a rectangle". Now call the method of 'Shape' and 'Rectangle' class by the object of 'Square' class.