

## ASSIGNMENT-4

### ABSTRACT CLASS & INHERITANCE.

1. Write a Java Program that has a class named StaticDemo. In that three static variables are there a, b, c.
  - a. Create a static method called fiboSeries (int n) that will generate the Fibonacci series up to n.
2. Write a Java Program that has an abstract class Figure. Here double dim1, dim2 are the member variables.

```
Figure(double a, double b) // a constructor
{
}
```

and an abstract method area()
  - a. Create a class rectangle that extends Figure class. Rectangle constructor that will call the super class constructor, implement area method(dim1 \*dim2)
  - b. Create a class Triangle that extends Figure class. Triangle class constructor that also calls the super class constructor(dim1\*dim2/2)
3. Write a Java Program that has a class “Bank”
  - a. Acno, AcType, Acname, Opbalance
  - b. Create method called Interest that will calculate interest on Account  
8% P.A on saving account  
6% P.A. on current account
  - c. Create a class constructor to initialize its values.Create two classes called “saving AC” and “current AC”.  
Create parameterized constructor that will accept all the values and pass to its parent class using super()  
Create method(override interest) method to calculate its interest.
4. Write a Java Program to perform following operations:
  - a. Create class Animal that has following details: Animalname, Animaltype and Animalsound.  
Create two classes:
    1. Wild that extends animal class and one method to display its details.
    2. Domestic that also extends Animal class and display method to display its details.

5. Write a Java Program for following Operations: (Use Interface)
- Create two class “two\_wheeler” and “Four\_wheeler” which implement from “Vehicle” interface.
  - Use constructor to add records.
  - In “Vehicle” interface, take at least two or three methods.
  - In sub class, Take variables, methods as per need to store and display information of vehicle.
  - “two\_wheeler” and “Four\_wheeler” should have variables to store name of model, mileage of vehicle.