**1.Create a class named 'Student' with String variable 'name' and integer variable 'roll\_no'. Assign the value of roll\_no as '2' and that of name as "John" by creating an object of the class Student.**

class Student{

String name;

int roll\_no;

Student(String name,int roll\_no){

this.name=name;

this.roll\_no=roll\_no;

}

}

class StudentDetails{

public static void main(String[] args){

Student s=new Student("John",2);

System.out.println(s.name+" "+s.roll\_no);

}

}

**2.Assign and print the roll number, phone number and address of two students having names "Sam" and "John" respectively by creating two objects of class 'Student'.**

class Student{

String name;

String address;

String phone\_no;

int roll\_no;

Student(String name,int roll\_no,String address,String phone\_no){

this.name=name;

this.roll\_no=roll\_no;

this.address=address;

this.phone\_no=phone\_no;

}

}

class StudentDetails{

public static void main(String[] args){

Student s=new Student("John",2,"Mumbai","9769176830");

Student s1=new Student("Sam",3,"Nashik","9769185855");

System.out.println(s.name+" "+s.roll\_no+" "+s.address+" "+s.phone\_no);

System.out.println(s1.name+" "+s1.roll\_no+" "+s1.address+" "+s1.phone\_no);

}

}

3.

Write a program to print the area and perimeter of a triangle having sides of 3, 4 and 5 units by creating a class named 'Triangle' without any parameter in its constructor.

4.

Write a program to print the area and perimeter of a triangle having sides of 3, 4 and 5 units by creating a class named 'Triangle' with constructor having the three sides as its parameters.

class Triangledetails{

int side1;

int side2;

int side3;

double area=0;

double p=0;

double perimeter=0;

Triangledetails(int side1,int side2,int side3){

this.side1=side1;

this.side2=side2;

this.side3=side3;

}

public void perimeter(){

perimeter=(this.side1+this.side2+this.side3);

System.out.println(perimeter);

}

public void area(){

perimeter=(this.side1+this.side2+this.side3);

p=perimeter/2;

area=Math.sqrt(p\*(p-this.side1)\*(p-this.side2)\*(p-this.side3));

System.out.println("area of triangle is"+area);

}

}

class Triangle{

public static void main(String[] args){

Triangledetails t = new Triangledetails(3,4,5);

t.perimeter();

t.area();

}

}

5.

Write a program to print the area of two rectangles having sides (4,5) and (5,8) respectively by creating a class named 'Rectangle' with a method named 'Area' which returns the area and length and breadth passed as parameters to its constructor.

class Rectangledetails{

int length;

int breadth;

double area;

Rectangledetails(int l,int b){

length=l;

breadth=b;

}

public double area(){

area=length\*breadth;

return area;

}

}

class Rectangle{

public static void main(String[] args){

Rectangledetails r = new Rectangledetails(4,5);

//t.perimeter();

System.out.println(r.area());

Rectangledetails r1 = new Rectangledetails(5,8);

System.out.println(r1.area());

}

}

6.

Write a program to print the area of a rectangle by creating a class named 'Area' having two methods. First method named as 'setDim' takes length and breadth of rectangle as parameters and the second method named as 'getArea' returns the area of the rectangle. Length and breadth of rectangle are entered through keyboard.

7.

Write a program to print the area of a rectangle by creating a class named 'Area' taking the values of its length and breadth as parameters of its constructor and having a method named 'returnArea' which returns the area of the rectangle. Length and breadth of rectangle are entered through keyboard.

import java.util.Scanner;

class Area{

int length;

int breadth;

double area;

Area(int m,int n){

length=m;

breadth=n;

}

public double getArea(){

area=length\*breadth;

return area;

}

}

class Area1{

public static void main(String[] args){

int j;

int k;

Scanner s=new Scanner(System.in);

System.out.println("Enter length");

j=s.nextInt();

System.out.println("Enter breadth");

k=s.nextInt();

Area a = new Area(j,k);

System.out.println(a.getArea());

}

}