1.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.

2.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;
}

class Ans{
  public static void main(String[] args){
    Student s = new Student();
    s.name = "John";
    s.roll_no = 2;
    System.out.println("Name is "+s.name+" and roll number is "+s.roll_no);
  }
}
```

3.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'.

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' without any parameter in its constructor.

```
class Triangle{
  int a,b,c;
  public double getArea(){
    double s = (a+b+c)/2.0;
    return Math.pow((s*(s-a)*(s-b)*(s-c)),.5);
  }
  public double getPerimeter(){
    return (a+b+c)/2.0;
  }
}

class Ans{
  public static void main(String[] args){
    Triangle t = new Triangle();
    t.a = 2;
    t.b = 5;
    t.c = 6;
    System.out.println(t.getArea());
    System.out.println(t.getPerimeter());
  }
}
```

5.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.

6. 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.

```java
class Rectangle{
  int length;
  int breadth;
  public Rectangle(int l, int b){
    length = l;
    breadth = b;
  }
  public int getArea(){
    return length*breadth;
  }
  public int getPerimeter(){
    return 2*(length+breadth);
  }
}

class Ans{
  public static void main(String[] args){
    Rectangle a = new Rectangle(4,5);
    Rectangle b = new Rectangle(5,8);
    System.out.println("Area : "+a.getArea()+" Perimeter is "+a.getPerimeter
());
    System.out.println("Area : "+b.getArea()+" Perimeter is "+b.getPerimeter
());
  }
}
```

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.

```java
import java.util.*;
class Area{
  int length;
  int breadth;
  public Area(int l, int b){
    length = l;
    breadth = b;
  }
  public int getArea(){
    return length*breadth;
  }
}

class Ans{
  public static void main(String[] args){
    Scanner s = new Scanner(System.in);
    int l,b;

    System.out.println("Enter length");
    l = s.nextInt();
    System.out.println("Enter breadth");
    b = s.nextInt();

    Area a = new Area(l,b);
    System.out.println("Area : "+a.getArea());
  }
}
```

8.Print the average of three numbers entered by user by creating a class named 'Average' having a method to calculate and print the average.

9.Print the sum, difference and product of two complex numbers by creating a class named 'Complex' with separate methods for each operation whose real and imaginary parts are entered by user.

```
import java.util.*;
class Complex{
  int real;
  int imag;
  public Complex(int r, int i){
    real = r;
    imag = i;
  }

  public static Complex add(Complex a, Complex b){
    return new Complex((a.real+b.real),(a.imag+b.imag));
  }

  public static Complex diff(Complex a, Complex b){
    return new Complex((a.real-b.real),(a.imag-b.imag));
  }

  public static Complex product(Complex a, Complex b){
    return new Complex(((a.real*b.real)-(a.imag*b.imag)),((a.real*b.imag)+(a.im
ag*b.real)));
  }

  public void printComplex(){
    if(real == 0 && imag!=0){
      System.out.println(imag+"i");
    }
    else if(imag == 0 && real!=0){
```

```
    else if(imag == 0 && real!=0){
      System.out.println(real);
    }
    else{
      System.out.println(real+"+"+imag+"i");
    }
  }

}

class Ans{
  public static void main(String[] args){
    Complex c = new Complex(4,5);
    Complex d = new Complex(9,4);

    Complex e = Complex.add(c,d);
    Complex f = Complex.diff(c,d);
    Complex g = Complex.product(c,d);
    e.printComplex();
    f.printComplex();
    g.printComplex();
  }
}
```

10. Write a program that would print the information (name, year of joining, salary, address) of three employees by creating a class named 'Employee'. The output should be as follows:

Name	Year of joining	Address
Robert	1994	64C- WallsStreat
Sam	2000	68D- WallsStreat
John	1999	26B- WallsStreat

11. Add two distances in inch-feet by creating a class named 'AddDistance'.