Write a java program which has two classes. First class named rectangle which has three members, height, width, and depth and two methods, a parametrized constructor, one method will calculate the volume of a rectangle and another will calculate the perimeter of a rectangle. Second class named circle which has a member radius, a parameterized constructor, and two methods, first method will calculate the area of a circle and second method will calculate the perimeter of a circle. Create objects of rectangle and circle class inside the main class and call the methods.

```
class rectangle1{
    double height;
    double width;
    double depth;
    rectangle1(double height, double width, double
depth){
        this.height=height;
        this.width=width;
        this.depth=depth;
    }
    double volume() {
        return height*width*depth;
    }
    double perimeter() {
        return 2*(height+width);
        }

}
class circle{
    double radius;
    circle(double radius){
        this.radius=radius;
    }
    double volume() {
        return Math.PI*(radius*radius);
    }
    double perimeter() {
        return 2*Math.PI*radius;
    }
```

```
}
public class rec_circle {

    public static void main(String[] args) {
        rectangle1 r=new
rectangle1(40.5,20.3,10.4);// TODO Auto-generated
method stub
        circle c=new circle(25.6);
        System.out.println("The volume of the
rectangle is"+r.volume());
        System.out.println("The perimeter of the
rectangle is"+r.perimeter());
        System.out.println("The volume of the circle
is"+c.volume());
        System.out.println("The perimeter of the
circle is"+c.perimeter());
    }

}
```

Write a java program which will have a class named arraysum. The arraysum class has an array as a member, a constructor which will have an array as a parameter and it will assign the values to the member, and a method sum which will add the elements from the array. Create an object of the arraysum class inside the main class and call the methods.

```
package ice107onlineclass;
class arraysum{
    int arr[];
    arraysum(int arr[]){
        this.arr=arr;
    }
    void sum() {
        int sum=0;
        for(int i=0; i<arr.length;i++) {
            sum=sum+arr[i];
```

```
        }
        System.out.println("sum of the array element
is"+sum);

    }


}
public class arraysum_1 {

    public static void main(String[] args) {
        arraysum a= new arraysum(new int[]
{40,50,55,67,73,12,14,16,29,32});
        a.sum();// TODO Auto-generated method stub

    }

}
```

Write a java program which will have a class named arrayeven. The class will have an array as a member, a constructor which will have an array as a parameter and it will assign the values to the member. The class will also have a method which will add all the even numbers from an array and multiply all the odd numbers. Create object of the arrayeven class inside the main class and call the method.