

Experiment No: 2

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Program:

Program 1: Write a program for a calculating Area using methods.

```
class AreaUsingMethod {  
  
    public static void main(String args[]) {  
  
        Area(15);  
        Area(158, 20);  
        Area(15.5);  
        Area(15.6, 19.3);  
    }  
  
    static void Area(int a) {  
        System.out.println("Area of Square is : " + (a * a));  
    }  
  
    static void Area(int a, int b) {  
        System.out.println("Area of Triangle is : " + (a * b));  
    }  
  
    static void Area(double a, double b) {  
        System.out.println("Area of Rectangle is : " + (a * b));  
    }  
  
    static void Area(double r) {  
        System.out.println("Area of Circle is : " + (3.14 * r * r));  
    }  
}
```

Program 2: Write a program for a calculating Area using method overloading.

```
class Area {
    String shape;
    double area;

    public void display() {
        System.out.println("Area of " + shape + " is : " + area);
    }

    Area(double l, double b) {
        area = l * b;
        shape = "Rectangle";
    }

    Area(int b, int h) {
        area = (h * b) / 2;
        shape = "Triangle";
    }

    Area(int side) {
        area = side * side;
        shape = "Square";
    }

    Area(double r) {
        area = 3.14 * (r * r);
        shape = "Cirle";
    }
}

class EXP2 {
    public static void main(String Args[]) {

        Area s = new Area(15);
        Area r = new Area(15.5, 20.2);
        Area c = new Area(12.5);
        Area t = new Area(5, 9);
        s.display();
        r.display();
        c.display();
        t.display();
    }
}
```

Output:

Select C:\Windows\system32\cmd.exe

C:\Users\anike>D:

d:\Programming\College Experiments\TY 5 Sem\JAVA PL>javac EXP2.java

d:\Programming\College Experiments\TY 5 Sem\JAVA PL>java EXP2

Area of Square is : 225.0

Area of Rectangle is : 313.09999999999997

Area of Circle is : 490.625

Area of Triangle is : 22.0

d:\Programming\College Experiments\TY 5 Sem\JAVA PL>javac AreaUsingMethod.java

d:\Programming\College Experiments\TY 5 Sem\JAVA PL>java AreaUsingMethod

Area of Square is : 225

Area of Triangle is : 3160

Area of Circle is : 754.385

Area of Rectangle is : 301.08

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