

02/01/24

URBAN
EDGE

```
import java.util.Scanner;  
abstract class shape
```

```
{  
    double dim1, dim2, radius;  
    shape(double a, double b)
```

```
{  
        dim1 = a;
```

```
        dim2 = b;
```

```
    }  
    shape(double a)
```

```
{  
        radius = a;
```

```
    }  
    abstract void area();
```

```
}  
class Rectangle extends shape
```

```
{  
    Rectangle(double a, double b)
```

```
{  
        super(a, b);
```

```
    }  
    void area()
```

```
{  
        System.out.println("The area of rectangle" +  
            (dim1 * dim2));
```

```
    }  
}  
class Triangle extends shape
```

```
{  
    Triangle(double a, double b)
```



```
        super(a, b);  
    }  
    void area()  
    {  
        System.out.println("area of triangle" +  
            (dim1*dim2)/2);  
    }  
}  
class Circle extends shape  
{  
    Circle(double a)  
    {  
        super(a);  
    }  
    void area()  
    {  
        System.out.println("area of circle" + 3.14*  
            (radius)*(radius));  
    }  
}  
class AbstractRealMain  
{  
    public static void main(String args[])  
    {  
        System.out.println("enter your name: Rani Arishwara  
            + "s");  
        System.out.println("enter your UIN: 18M22CS212");  
        Scanner s = new Scanner(System.in);  
        System.out.println("enter the length and breadth  
            of the rectangle");  
        double l = s.nextInt();  
        double b = s.nextInt();  
    }  
}
```



```
System.out.println("enter the base and height");
double b1 = s.nextInt();
double h2 = s.nextInt();
System.out.println("enter the radius of circle");
double r = s.nextInt();
Shape sh;
Rectangle o = new Rectangle(d, h);
Triangle t = new Triangle(h1, h2);
Circle c = new Circle(r);
sh = o;
sh.area();
sh = t;
sh.area();
sh = c;
sh.area();
```

output:

enter the name: RaniAishwarya H S

enter your usn: IBM22ES212

enter the length and breadth of the rectangle

5

6

enter the base and height

8

9

enter the radius of circle

6

the area of rectangle 30.0

area of triangle 36.0

area of circle 15.039999

8
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