

Command Prompt

```
C:\Users\Hima\Desktop\java>javac shapemain.java
```

```
C:\Users\Hima\Desktop\java>java shapemain
```

```
area of rectangle:8
```

```
area of triangle:4
```

```
area of circle:12.56
```

```
C:\Users\Hima\Desktop\java>
```

/*Develop a Java program to create an abstract class named Shape that contains two integers and an empty method named printArea(). Provide three classes named Rectangle, Triangle and Circle such that each one of the classes extends the class Shape. Each one of the classes contain only the method printArea() that prints the area of the given shape.*/

```
abstract class shape
{
    int a,b;
    abstract void printArea();
}

class Rectangle extends shape
{
    Rectangle(int x,int y)
    {
        a=x;
        b=y;
    }
    void printArea()
    { System.out.println("area of rectangle:"+ a*b);}
}
class triangle extends shape
{
    triangle(int x,int y)
    {
        a=x;
        b=y;
    }
    void printArea()
    { System.out.println("area of triangle:"+ (a*b)/2);}
}
class circle extends shape
{
```

```
{

    triangle(int x,int y)
    {
        a=x;
        b=y;
    }
    void printArea()
    { System.out.println("area of triangle:"+ (a*b)/2);}
}
class circle extends shape
{

    circle(int x)
    {
        a=x;

    }
    void printArea()
    { System.out.println("area of circle:"+ 3.14*a*a);}
}
class shapemain
{
    public static void main(String sss[])
    {

        Rectangle r =new Rectangle(2 ,4);
        r.printArea();
        triangle t =new triangle(2 ,4);
        t.printArea();
        circle c =new circle(2 );
        c.printArea();
    }
}
```
