2. Develop a program to create abstract class shape that contains two integers & empty method print area (). Provide class rectangle, triangle & circle & print area.

```java
import java.util.*;
abstract class Shape
{
  int a, b;
  shape (int a, int b)
  {
  this.a = a;
  this.b = b;
  }
  abstract void area ();
}
class Rectangle extends shape
{
  Rectangle (int a, int b)
  {
  super (a, b);
  }
  void area () {
  int area = (a* b);
  System.out.println (" Area of rectangle : " + area);
  }

class Triangle extends shape
{
  Triangle (int a, int b)
  {
  } super (a, b);
```

```java
void area () {
    int area = (int) (0.5 * a * b);
    System.out.println(" Area of triangle: " + area);
}
}

class Circle extends shape {
    Circle (int a, int b)
    {
        super (a, 0);
    }
    void area ()
    {
        double area ()
        {
            int area = (int) (3.14 * a * a);
            System.out.println (" Area of circle: " + area);
        }
    }
}

public class Demo
{
    public static void main (String args [])
    {
        Scanner sc = new Scanner (System.in);
        System.out.println (" Enter two values);
        int a = sc.nextInt();
        int b = sc.nextInt();
        Rectangle r = new Rectangle (a, b);
        r.area();
        Triangle t = new Triangle (a, b);
        t.area ();
        Circle c = new Circle (a, 0);
        c.area ();
    }
}
```

Output :

Enter sides of rectangle:

4

5

Area of rectangle: 20.0 ✓.

Enter sides of triangle

65

7

Area of triangle : 227.5

Enter radius of circle: ~~8~~.

5

Area of circle us : 78.5

22.10