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Lab program 4.

```
import java.util.Scanner;
abstract class Shape1
{
  int a, b;
  Shape1(int a, int b)
  {
    this.a = a;
    this.b = b;
  }
  abstract void printarea();
}
class Rectangle extends Shape1
{
  Rectangle(int a, int b)
  {
    super(a, b);
  }
  void printarea()
  {
    System.out.println("Area of rectangle :"+(a*b));
  }
}

class Triangle extends Shape1
{
  Triangle(int a, int b)
  {
    super(a, b);
  }
  void printarea()
```

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```
    {
      System.out.println("Area of triangle:"
                  +(0.5*a*b));
    }
}
class circle extends Rectangle.Shape1.
{
    circle(int a, int b)
{
    super(a, b);
}
    void printarea()
{
    System.out.println("Area of circle:"
                +(3.14*a*a));
}
}

class Main
{
    public static void main(String args[])
{
    Scanner s = new Scanner(System.in);
    System.out.println("Enter length and breadth
                of Rectangle:");
      int length = s.nextInt();
      int breadth = s.nextInt();
    Rectangle rectangle = new Rectangle(length,
                breadth);
    System.out.println("Enter base and height
                of triangle:");
      int base = s.nextInt();
```

```
int height = S.nextInt();
Triangle triangle = new Triangle(base, height);
System.out.println("Enter radius of circle:");
int radius = S.nextInt();
Circle circle = new Circle(radius, radius);
rectangle.printarea();
triangle.printarea();
circle.printarea();
}
}
```

output:

```
Enter length and breadth of Rectangle:
2 3
Enter base and height of Triangle:
2 4
Enter radius of circle:
3
Area of rectangle: 6
Area of triangle: 4.0
Area of circle: 28.259999999
```

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