# LAB-4.

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Q-4) 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.

→
```
import java.util.*;
abstract class Shape
{
    int l, b, r;
  Scanner input = new Scanner (System.in);
  abstract void printArea();
}
class Rectangle extends Shape
{
    void printArea()
    {
  System.out.println ("FOR RECTANGLE");
  System.out.println(" Enter length and breadth");
  l = input.nextInt();
  b = input.nextInt();
  System.out.println(" The are of Rectangle
                    is :" + l*b);
    }
}
class Triangle extends Shape
{ void printArea()
  { System.out.println(" FOR TRIANGLE ");
```



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```
System.out.printlnaa (" Enter Base and Height");
    b = input.nextInt();
    h= input.nextInt();
    }
}
class Circle extends Shape
{  void printArea()
   { System.out.println(" FOR CIRCLE");
     System.out.println(" Enter Radius:");
     r= input.nextInt();
     System.out.println(" The area of Circle is
                        " +3.14f*r*r );
    }
}
class Abstract
{
public static void main (String args[])
  {
    Rectangle r = new Rectangle();
     r. printArea();
     Triangle t = new Triangle();
     t. printArea();
     Circle c = new Circle();
      c. printArea();
  }
}
```



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