```java
Program 4

import java.util.Scanner;
import java.lang.Math;

abstract class Shape
{
    int a;
    int b;
    Scanner in = new Scanner(System.in);
    abstract void printArea();
}

class rectangle extends Shape
{
    int area_rect;
    rectangle()
    {
        System.out.println("Enter the dimensions of rectangle length, breadth
        a = in.nextInt();
        b = in.nextInt();
    }
    void printArea()
    {
        area_rect = a*b;
        System.out.println("The area of rectangle is: "+area_rect);
    }
}

class traingle extends Shape
{
    double area_tri;
    traingle()
```

```java
{
    System.out.println ("enter the dimensions of traingle bax
                        and height");
    a = in.nextInt();
    b = in.next Int ();
}

void printArea ()
{
    area_tri = 0.5*a*b;
    System.out.println ("The area of traingle is : "+area_tri);
}
}

class circle extends shape
{   double cir_area();
    circle()
    {
        System.out.println ("Enter the radius");
        a = in.nextInt ();
    }

    void printArea ()
    {
        cir_area = 3.14*a*a;
        System.out.println ("The area of circle is : "+cir_area);
    }
}

class Figure
{   public static void main (String args[])
    {
        rectangle r = new rectangle();
```

```
        r.printArea();
        traingle t = new traingle();
        t.printArea();
        circle c = new circle();
        c.printArea();
    }
}
```