Q4. Develop a Java program to create an abstract class named shape that contains two integers and an empty method named printArea().

⟹ abstract class shape {
    int dim1, dim2;
    Shape (int x, int y) {
        dim1 = x;
        dim2 = y;
        abstract double printArea();
    }

class Rectangle extends shape {
    Rectangle (int a, int b) {
        super (a,b);
    }
    double printArea () {
        return dim1 * dim2;
    }
}

class Triangle extends Shape {
    Triangle (int a, int b) {
        super (a,b);
    }
    double printArea() {
        return 0.5 * dim1 * dim2;
    }
}

class circle extends shapes {
    circle (int a, int b) {
        super (a,b);
    }
}

```java
    double printArea() {
        return 3.14 * dim1 * dim1;
    }
  }
}


class AbstractDemo {
    public static void main(String ss[]) {
        Rectangle r = new Rectangle(100, 240);
        Triangle t = new Triangle(10, 20);
        Circle c = new Circle(10, 0);

        System.out.println("Area of Rectangle : " + r.printArea());
        System.out.println("Area of Triangle: " + t.printArea());
        System.out.println("Area of Circle: " + c.printArea());
    }
}
```

O/P
Area of Rectangle : 24000.0
Area of Triangle : 100.0
Area of Circle : 314.0