6-11-20 Lab - 4

Q→ Develop a Java Program to create a abstract class named shape ..... of the given shape

```
import java.util.*;
abstract class Shape {
    int a = 1, b = 2;
    abstract void printarea();
}
class Rectangle extends Shape {
    void printarea() {
    double area = a * b;
    System.out.println("Rec area: " + area);
    }
}
class Triangle extends Shape {
    void printarea() {
        double area = 0.5 * a * b;
        System.out.println("Triangle area " + area);
        }
}
class Circle extends Shape {
    void printarea() {
        double area = 3.14 * a * a;
        System.out.println("Circle's area" + circle);
    }
}
```

```
class Main {
    public static void main (String args[])
    Rectangle r = new Rectangle ();
    r.printArea ();
    Triangle t = new Triangle ();
    t.printArea ();
    Circle c = new Circle ();
    c.printArea ();
    }
}
```

O/P ->

Rec's Area : 2.0
Triangle Area : 1.0
Circle Area : 3.14

Algorithm

1. Create abstract class with an abstract method
2. Create 3 classes derived from super class
3. Calculate area of each class
4. To print the area via main class
5. End