Lab - 9

Name S Skande

USN : IBM19CS 137

Batch - 2

To create abstract class shape with two integer members.
and create three class namely circle, rectangle and triangle
to demonstrate the function overriding

```
abstract class shape ( ) {
    int dim 1;
    int dim2;
    shape (int a, int b) {
        dim1 = a;
        dim2 = b;
}
class Rectangle extends shape {
    Rectangle (int a, int b) {
        super (a, b);
    }
    void area() {
        double area = dim1 * dim2;
        System.out.println ("Area of Rectangle is " + area);
    }
}
class Triangle extends shape {
    Triangle (int a, int b) {
        super (a, b);
    }
    void area () {
        double area = dim1 * dim2 /2;
        System.out.println ("Area of Triangle is " + area);
    }
}
```

```java
class Circle extends shape {
    Circle (int a, int b) {
        super(a, b);
    }
    void area() {
        double area = 3.14 x dim1 * dim1;
        System.out.println("Area of circle is " + area);
    }
}

class shapes {
    public static void main (String args[]) {
        Rectangle r = new Rectangle (7, 3);
        Triangle t = new Triangle (6, 8);
        Circle c = new Circle (5, 5);
        Shape s;
        s = r;
        s.area();
        s = t;
        s.area();
        s = c;
        s.area();
    }
}
```

Output

Area of rectangle is 21
Area of triangle is 24
Area of circle is 78.5