

# **LABPROGRAM 4 OBSERVATION**

## **(07/10/2020)**

03/11/2020;

## LAB 5

①. /\* abstract class shape \*/

```
import java.util.Scanner;
```

```
abstract class shape {
```

```
    double dim1, dim2;
```

```
    shape (double a, double b)
```

```
        dim1 = a;
```

```
        dim2 = b;
```

```
    }
```

```
    abstract double printarea();
```

```
class rectangle extends shape {
```

```
    rectangle (double a, double b) {
```

```
        super (a, b) }
```

```
    double printarea() {
```

```
        System.out.println ("AREA OF
```

```
        return dim1 * dim2;
```

```
    }
```

```
class triangle extends shape {  
    triangle (double a, double b) {  
        super (a, b) }  
}
```

```
    double printarea () {  
        System.out.println ("AREA OF TRIANGLE")  
        return dim1 * dim2 / 2 ;  
    }  
}
```

```
class circle extends shape {  
    circle (double a, double b) {  
        super (a, b);  
    }  
}
```

```
    double printarea () {  
        System.out.println ("AREA OF CIRCLE")  
        return (3.14 * (dim1 * dim2))  
    }  
}
```

```
class shapeMain {  
    public static void main (String [] args) {  
        rectangle r = new rectangle (a: 10, b: 5)  
        triangle t = new triangle (a: 10, b: 5)  
        circle c = new circle (a: 10, b: 5)  
    }  
}
```

```
        System.out.println ("Area of rectangle: " + r.printarea())  
        System.out.println ("Area of triangle: " + t.printarea())  
        System.out.println ("Area of circle: " + c.printarea())  
    }  
}
```