LABPROGRAM 4 EXECUTION (07/10/2020)

Q) ABSTRACT CLASSES

```
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.print("AREA OF RECTANGLE :");
     return dim1 * dim2;
    }
}


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

    double printarea(){
        System.out.print("AREA OF TRIANGLE :");
        return dim1 * dim2/2.0;
    }
}



class circle extends shape{
    circle(double a,double b) {
    super(a,b);
    }
    double printarea(){
       System.out.print("AREA OF CIRCLE :");
        return (3.14*(dim1*dim1));
    }
}
```

```java
class shapeMain{
    public static void main(String ss[]){
        rectangle r = new rectangle(10,10);
        circle c = new circle(10,0);
        triangle t = new triangle(10,10);

        System.out.println(" "+r.printarea());
        System.out.println(" "+c.printarea());
        System.out.println(" "+t.printarea());
    }
}
```

OUTPUT

```
AREA OF RECTANGLE : 100.0
AREA OF CIRCLE : 314.0
AREA OF TRIANGLE : 50.0

Process finished with exit code 0
```