

WEEK 8

OOJ LAB PROGRAM 8

1.abstract class Shape

```
{
    int side1,side2;
    double area;
    abstract void printArea();
}
```

class Rectangle extends Shape

```
{
    Rectangle(int l, int b)
    {
        side1=l;
        side2=b;
    }
    void printArea()
    {
        area=side1*side2;
        System.out.println("The area of the Rectagle is: "+area);
    }
}
```

class Triangle extends Shape

```
{
    Triangle(int h, int b)
    {
        side1=h;
        side2=b;
    }
    void printArea()
    {
        area=0.5*side1*side2;
        System.out.println("The Area of the triangle is: "+area);
    }
}
```

class Circle extends Shape

```
{
    Circle(int r)
    {
        side1=r;
    }
}
```

```

void printArea()
{
    area=3.14*side1*side1;
    System.out.println("The Area of the Circle is: "+area);
}
}

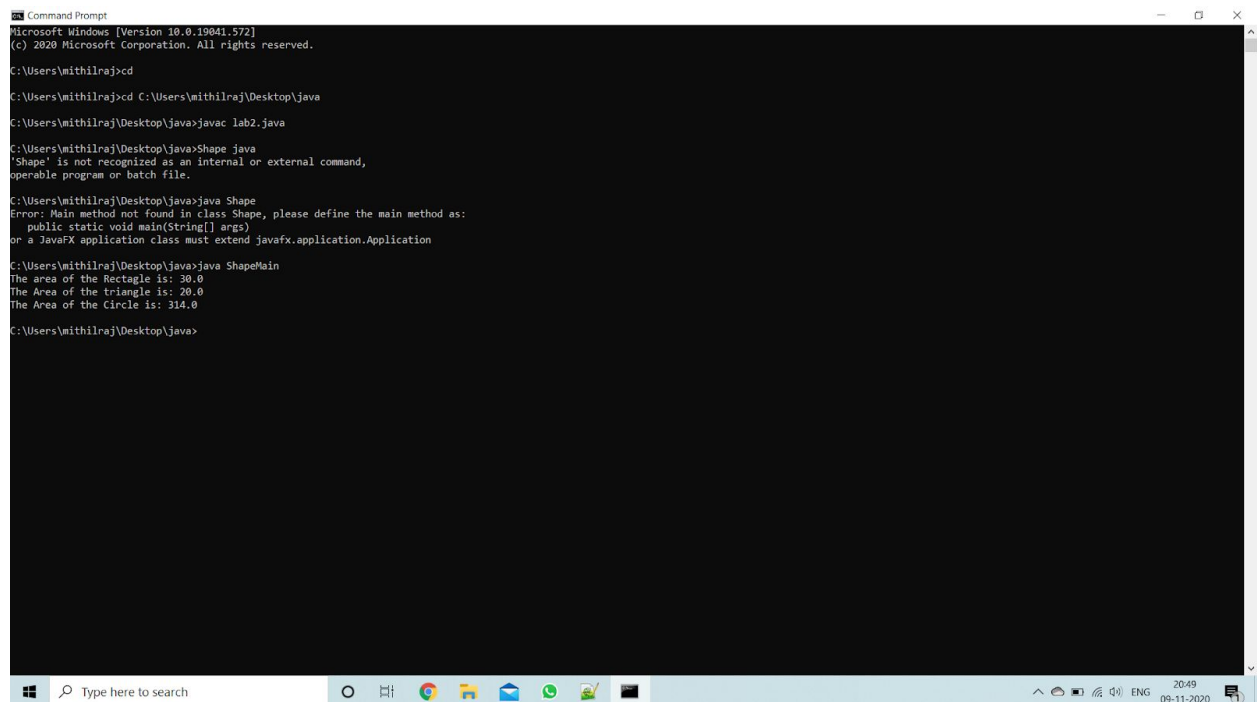
```

```

class ShapeMain
{
    public static void main(String args[])
    {
        Rectangle rect=new Rectangle(5,6);
        rect.printArea();
        Triangle tri=new Triangle(5, 8);
        tri.printArea();
        Circle cir=new Circle(10);
        cir.printArea();
    }
}

```

OUTPUT:-



```

Command Prompt
Microsoft Windows [Version 10.0.19041.572]
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C:\Users\mithilraj>cd
C:\Users\mithilraj>cd C:\Users\mithilraj\Desktop\java
C:\Users\mithilraj\Desktop\java>javac lab2.java
C:\Users\mithilraj\Desktop\java>java Shape
'Shape' is not recognized as an internal or external command,
operable program or batch file.
C:\Users\mithilraj\Desktop\java>java Shape
Error: Main method not found in class Shape, please define the main method as:
  public static void main(String[] args)
or a JavaFX application class must extend javafx.application.Application
C:\Users\mithilraj\Desktop\java>java ShapeMain
The area of the Rectagle is: 30.0
The Area of the triangle is: 20.0
The Area of the Circle is: 314.0
C:\Users\mithilraj\Desktop\java>

```