

WEEK 4 COMPUTING AREA OF CIRCLE, RECTANGLE AND TRIANGLE USING ABSTRACT CLASS

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SOURCE CODE:

```
import java.util.*;

abstract class a
{
    double a,b;
    a(double i, double j)
    {
        a = i;
        b = j;
    }
    abstract double area();
}

class rectangle extends a
{
    rectangle(double i, double j)
    {
        super(i, j);
    }
    double area()
    {
        return a*b;
    }
}

class triangle extends a
{
    triangle(double i, double j)
    {
        super(i, j);
```

```

}

double area()
{
return 0.5*a*b;
}
}

class circle extends a
{
circle(double i)
{
super(i, i);
}

double area()
{
return 3.14*a*b;
}
}

class areas
{
public static void main(String args[])
{
rectangle r = new rectangle(8, 6);
triangle t = new triangle(5, 4);
circle c = new circle(7);
System.out.println("The area of the rectangle is: "+r.area());
System.out.println("The area of the triangle is: "+t.area());
System.out.println("The area of the circle is: "+c.area());
}
}

```

OUTPUT:

```
Command Prompt
Microsoft Windows [Version 10.0.22000.1219]
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C:\Users\Admin>cd

C:\Users\Admin>cd C:\Users\Admin\Desktop\1BM21CS247

C:\Users\Admin\Desktop\1BM21CS247>set path=C:\Program Files\Java\jdk-19\bin

C:\Users\Admin\Desktop\1BM21CS247>javac areas.java

C:\Users\Admin\Desktop\1BM21CS247>java areas
The area of the rectangle is: 48.0
The area of the triangle is: 10.0
The area of the circle is: 153.86

C:\Users\Admin\Desktop\1BM21CS247>
```