NAME:SUBRAMANYA L

USN:1BM21CS222

WEEK-4

```java
import java.util.*;
abstract class shape
{
 int a,b;
 abstract public void printarea();
}
class rectangle extends shape
{
public int area_rect;
public void printarea()
{
  Scanner s=new Scanner(System.in);
  System.out.println("enter the length and breadth of rectangle");
  a=s.nextInt();
  b=s.nextInt();
  area_rect=a*b;
  System.out.println("Length of rectangle "+a +"breadth of rectangle "+b);
  System.out.println("The area ofrectangle is:"+area_rect);
 }
 }
class triangle extends shape
{
 double area_tri;
 public void printarea()
{
Scanner s=new Scanner(System.in);
System.out.println("enter the base and height of triangle");
```

```java
a=s.nextInt();

b=s.nextInt();

System.out.println("Base of triangle "+a +"height of triangle  "+b);

area_tri=(0.5*a*b);

System.out.println("The area of triangle is:"+area_tri);

}

}

class circle extends shape

{

double area_circle;

public void printarea()

{

Scanner s=new Scanner(System.in);

System.out.println("enter the radius of circle");

a=s.nextInt();

 area_circle=(3.14*a*a);

 System.out.println("Radius of circle"+a);

 System.out.println("The area of circle is:"+area_circle);

 }

}

public class shapeclass

{

 public static void main(String[] args)

{

rectangle r=new rectangle();

r.printarea();

 triangle t=new triangle();

 t.printarea();

circle r1=new circle();

r1.printarea();

}
```

}

```
07-12-2022  23:26    <DIR>          WEB-D-PROJECT
08-12-2022  00:59             1,383 week_4.java
               2 File(s)         1,484 bytes
               3 Dir(s)  185,592,086,528 bytes free

C:\Users\Admin\Desktop\1BM21CS176>javac week_4.java
week_4.java:48: error: class shapeclass is public, should be declared in a file named shapeclass.java
public class shapeclass
       ^
1 error

C:\Users\Admin\Desktop\1BM21CS176>dir
 Volume in drive C has no label.
 Volume Serial Number is F618-59A5

 Directory of C:\Users\Admin\Desktop\1BM21CS176

08-12-2022  01:00    <DIR>          .
07-12-2022  21:41    <DIR>          ..
08-12-2022  00:59             1,383 shapeclass.java
01-12-2022  00:55               101 sud.java
07-12-2022  23:26    <DIR>          WEB-D-PROJECT
               2 File(s)         1,484 bytes
               3 Dir(s)  185,594,179,584 bytes free

C:\Users\Admin\Desktop\1BM21CS176>javac shapeclass.java

C:\Users\Admin\Desktop\1BM21CS176>java shapeclass
enter the length and breadth of rectangle
2
3
Length of rectangle 2breadth of rectangle 3
The area ofrectangle is:6
enter the base and height of triangle
3
4
Base of triangle 3height of triangle  4
The area of triangle is:6.0
enter the radius of circle
3
Radius of circle3
The area of circle is:28.259999999999998

C:\Users\Admin\Desktop\1BM21CS176>
```