

```
//24CE1056 DHRUVI HEGDE
```

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

```
class Radius{
```

```
double r;
```

```
void getRadius()
```

```
{
```

```
Scanner sc = new Scanner(System.in);
```

```
System.out.println("enter radius:");
```

```
r=sc.nextDouble();
```

```
}
```

```
}
```

```
class Circle extends Radius{
```

```
void findArea()
```

```
{
```

```
double area = 3.14*r*r;
```

```
System.out.println("the area of the circle is"+area);
```

```
}
```

```
}
```

```
class Sphere extends Circle{
```

```
void findVolume()
```

```
{
```

```
double volume =(4.0/3.0)*r*r*r;
```

```
System.out.println("the volume of sphere is"+volume);
```

```
}
```

```
}
```

```
class expt8
```

```
{
```

```
public static void main(String args[])
```

```
{
```

```
Sphere s = new Sphere();
```

```
s.getRadius();
```

```
s.findArea();
```

```
s.findVolume();
```

```
}
```

```
}
```

```
C:\Users\Admin\Desktop\24CE1056>javac expt8.java
```

```
C:\Users\Admin\Desktop\24CE1056>java expt8.java
```

```
enter radius:
```

```
49.0
```

```
the area of the circle is7539.14
```

```
the volume of sphere is156865.33333333333
```

```
C:\Users\Admin\Desktop\24CE1056>
```