```
import java.lang.Math;
import java.util.Scanner;
class Circle
{
        float r;

        Circle(float rad)
        {
                r=rad;
        }

        float Area_Circle()
        {
                return(22*r*r/7);
        }
}

class Sector extends Circle
{
        float tita;

        Sector(float rad,float T)
        {
                //r=rad;
                super(rad);
                tita=T;
        }

        float Area_Sector()
        {
                return(r*r*tita/2);
        }
}

class Segment extends Circle
{
        float h;

        Segment(float rad,float l)
        {
                //r=rad;
                super(rad);
                h=l;
        }

        double Area_Segment()
        {
                double A = r*r*((r-h)/r)-Math.pow((2*r*h-h*h),1/2);
                return A;
        }
}

class Test
{
        public static void main(String []args)
        {
```

```
                Scanner sc = new Scanner(System.in);
                float rad,T,l;
                System.out.println("Enter Radius of Circle:");
                rad = sc.nextFloat();
                Circle c = new Circle(rad);
                System.out.println("The area of the Circle of
Radius:"+rad+" is: "+c.Area_Circle());

                System.out.println("Enter Radius of Sector:");
                rad=sc.nextFloat();
                System.out.println("Enter Angle of Sector in
Radian:");
                T=sc.nextFloat();
                Sector s = new Sector(rad,T);
                System.out.println("The area of the Sector is:
"+s.Area_Sector());

                System.out.println("Enter Radius of Segment:");
                rad=sc.nextFloat();
                System.out.println("Enter the length of Segment:");
                l=sc.nextFloat();
                Segment st = new Segment(rad,l);
                System.out.println("The area of the Segment is:
"+st.Area_Segment());
        }
}
```