4

```
import java.util.Scanner;
class calc {
public static void main(String args[])
 {
  int ch=10;
 Scanner sc= new Scanner(System.in);
 while(ch!=4)
 {
System.out.println("1:Cylinder\n 2: Cone\n 3:Sphere\n
                    4:Exit\n Make your choice:\n");
  ch= sc.nextInt();
   switch(ch)
{
 case 1: cylinder();
     break;
 case 2: cone();
     break;
 case 3: sphere();
     break;
case 4: System.out.println(" Program done\n");
   break;
default: System.out.println(" Enter a valid choice\n")
  }
 }
}
static void cylinder()
 {
   Scanner sc= new Scanner(System.in);
System.out.println(" Enter the r & h:\n");
```

```
double r = sc.nextDouble();
double h = sc.nextDouble();
double a = 2*3.14*r*h + 2*3.14*r*r;
double v = 3.14*r*r*h;
System.out.println("The Area of cylinder:" +a);
System.out.println("The volume of cylinder:" +v);
}

Static void sphere()
{
Scanner sc = new Scanner(System.in);
System.out.println("Enter the r : \n");
    double r = sc.newDouble();
    double a = 3.14*r*r*4;
    double v = a*r/3;
System.out.println("The Area is:", +a);
System.out.println("the volume is :", +v);
}

Static void cone()
{
Scanner sc = new Scanner(System.in);
System.out.println("Enter the r & h: \n");
    double r = sc.nextDouble();
    double h = sc.nextDouble();
    double a = 3.14*r*(r+Math.sqrt(h*h+r*r));
    double v = 3.14*r*r*h/3;
System.out.println("The Area is: \n");
System.out.println("the volume is: \n");
}
```