```
package com.company;
      import java.util.Scanner;
3 01
      abstract class Solid{
       abstract void comp_surface_area();
           abstract void comp_volume();
      1
      class Cylinder extends Solid{
           Cylinder(int r, int h){
               this.h=h;
           void comp_surface_area() { System.out.println("Surface area of cylinder="+(2*3.14*r*(r+h))); }
           void comp_volume() { System.out.println("Volume of cylinder="+(3.14*r*r*h)); }
      class Cone extends Solid(
           Cone(int r,int h,int l){
           void comp_surface_area() { System.out.println("Surface area of cone="+(3.14*r*(r+l))); } void comp_volume() { System.out.println("Volume of cone="+((3.14*r*r*h)/3)); }
      int r;
```

```
Week8_extra_2.java × 🦪 Week8_extra_1.java × 🥵 Week6_3.java × 🐧 lp3_2.java × 🏮 lp3_1.java × 🐧 lp4.java × 👶 Week6_7.java
                                                                                                                 Week6_6.java
           Sphere(int r){
                                                                                                                          A2 ^
                this.r=r;
           void comp_surface_area() { System.out.println("Surface area of sphere="+(4*3.14*r*r)); }
           void comp_volume() { System.out.println("Volume of sphere="+((4*3.14*r*r*r)/3)); }
      public class Week8_extra_1 {
           public static void main(String[] args){
                Scanner s=new Scanner(System.in);
                int radius, height, slant_height;
                System.out.println("Enter the base radius and height of the cylinder respectively:");
                radius=s.nextInt();
                height=s.nextInt();
                Cylinder cy=new Cylinder(<u>radius</u>, <u>height</u>);
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                cy.comp_surface_area();
                cy.comp_volume();
                System.out.println("Enter the base radius, height and slant height of the cylinder respectively:");
                radius=s.nextInt();
                height=s.nextInt();
                 slant_height=s.nextInt();
                 Cone co=new Cone(<u>radius, height</u>, slant_height);
                 co.comp_surface_area();
                 co.comp_volume();
                 radius=s.nextInt();
                 sp.comp_surface_area();
```

```
height=s.nextInt();
slant_height=s.nextInt();
cone co=new Cone(radius, height, slant_height);
co.comp_surface_area();
co.comp_volume();
System.out.println("Enter the radius of the sphere:");
radius=s.nextInt();
Sphere sp=new Sphere(radius);
sp.comp_surface_area();
sp.comp_volume();
}

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```

