

1.

```
abstract class container {

    abstract double volume();

}

public class cylindricalcontainer extends container {

    private double height,radius;

    @Override
    public double volume(){
        double PI=3.14159;
        return PI*radius*radius*height;
    }

    cylindricalcontainer(double height,double radius){

        this.height = height;
        this.radius = radius;
    }

}

public class App {

    public static void main(String[] args) throws Exception {

        cylindricalcontainer c = new cylindricalcontainer(14,7);
```

```
c.volume();
```

```
System.out.println("Volume is: "+c.volume());
```

```
}
```

```
}
```