LAB SHEET 09 – ANSWERS

Question 01:

```
// Abstract class Container
abstract class Container
 {
 public abstract double volume();
}


// Class CylindricalContainer
class CylindricalContainer extends Container
 {
 private double height;
 private double radius;
 public CylindricalContainer(double R, double H)
{
 this.radius = R;
 this.height = H;
 }
 public double volume()
{
 return Math.PI * radius * radius * height;
```

```
 }
}


// Object and Display
public class Main
{
 public static void main(String[] args)
{
 CylindricalContainer cylinder = new CylindricalContainer(9,7 );
 System.out.println("Volume : " + cylinder.volume());
 }
}
```

Output of the volume is :- *1781.6431*

Question 02:

```
abstract class PC
{
 public abstract void moveUp();
 public abstract void moveDown();
 public abstract void moveLeft();
 public abstract void moveRight();
}

class RGP extends PlayerController
{
 public void moveUp()
{
 System.out.println("Player moves Up");
 }
 public void moveDown()
{
 System.out.println("Player moves Down");
 }
 public void moveLeft()
{
 System.out.println("Player moves Left");
 }
```

```
 public void moveRight()
{
 System.out.println("Player moves Right");
 }
}

public class Main
{
 public static void main(String[] args)
{
 RGP p1 = new RGP();
 p1.moveUp();
 p1.moveRight();
 p1.moveDown();
 p1.moveLeft();
 }
}
```

Output of this program is :-

```
Player moves Up
Player moves Right
Player moves Down
Player moves Left
```