

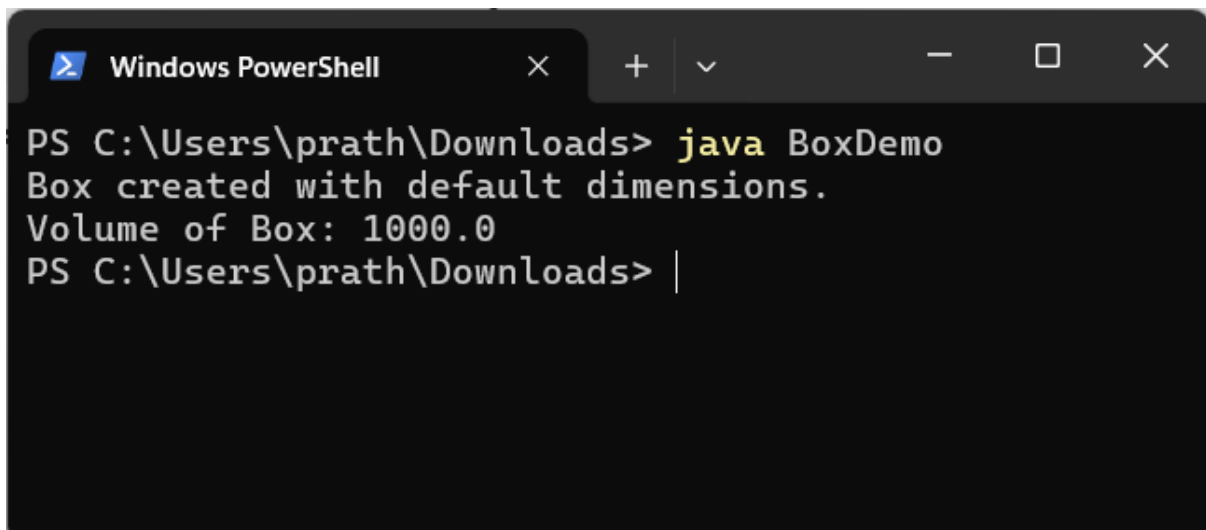
Assignment 1:Constructors : a) default / no parameter constructor.b) parameterized constructor.

Code:a) default / no parameter constructor

```
class Box {
    double width;
    double height;
    double depth;
    Box()
    {
        width = 10;
        height = 10;
        depth = 10;
    }
    void printVolume()
    {
        double vol = width * height * depth;
        System.out.println("Volume of Box: " + vol);
    }
}

class BoxDemo {
    public static void main(String args[])
    {
        Box b1 = new Box();
        b1.printVolume();
    }
}
```

Output:

A screenshot of a Windows PowerShell terminal window. The title bar shows 'Windows PowerShell' with standard window controls. The terminal content shows the command 'java BoxDemo' being executed in the directory 'C:\Users\prath\Downloads'. The output of the program is displayed: 'Box created with default dimensions.' followed by 'Volume of Box: 1000.0'. The prompt returns to 'PS C:\Users\prath\Downloads> |'.

Code:b) Parameterized constructor.

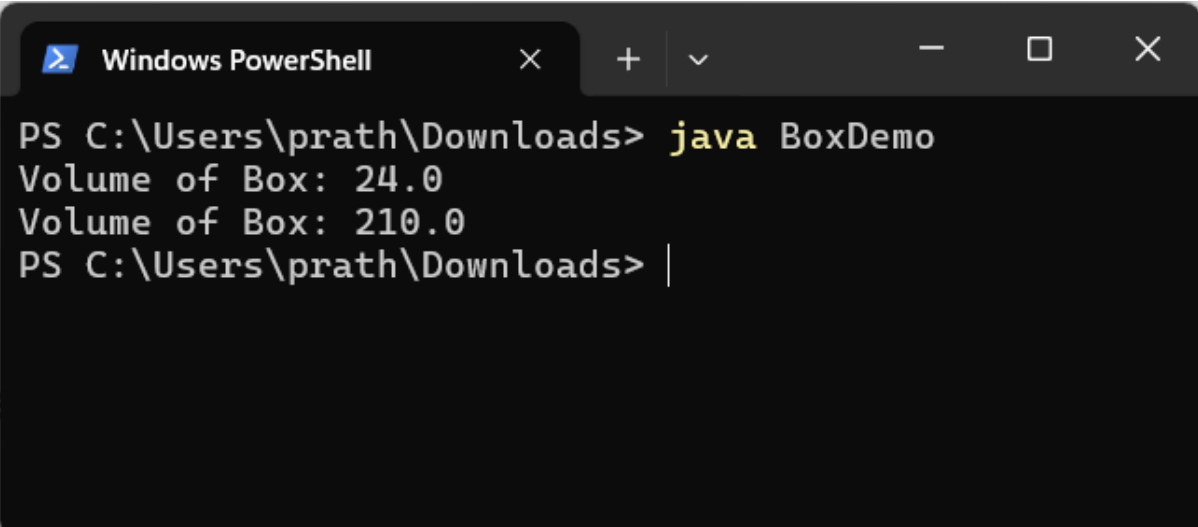
```
class Box
{
    double width;
    double height;
    double depth;

    Box(double w, double h, double d) {
        width = w;
        height = h;
        depth = d;
    }

    void printVolume() {
        double vol = width * height * depth;
        System.out.println("Volume of Box: " + vol);
    }
}

class BoxDemo
{
    public static void main(String args[])
    {
        Box b1 = new Box(2, 3, 4);
        Box b2 = new Box(5, 6, 7);
        b1.printVolume();
        b2.printVolume();
    }
}
```

OutPut:

A screenshot of a Windows PowerShell terminal window. The title bar shows 'Windows PowerShell' with standard window controls. The terminal text shows the command 'java BoxDemo' being executed at the prompt 'PS C:\Users\prath\Downloads>'. The output consists of two lines: 'Volume of Box: 24.0' and 'Volume of Box: 210.0'. The prompt is then shown again with a cursor: 'PS C:\Users\prath\Downloads> |'.