Practical – 4

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Date: - 24-08-21

Create a class Box having non static data member height, width, depth, static data member count, to count the number of objects created for class Box. In this class create a static method float Area (int h,int w, int d), static void DisplayCount() to display count and non static void Display() to display height, width, depth and counter both. Write a program to create objects of class Box and use various methods. Also demonstrate the use of static members using class name.

```
class Box
{
    float height, width, depth;
    static int count=0;
    Box(float height, float width, float depth)
    {
        this.height = height;
        this.width = width;
        this.depth = depth;
        count++;
    }
    static float Area(float h, float w, float d)
    {
        float Area = (2*((h*w)+(w*d)+(h*d)));
        return Area;
    }
    static void DisplayCount()
    {
        System.out.println("\nNumber of Objects of class box created are "+count);
    }
    void Display()
    {
        System.out.println("Height of the box is : "+height);
        System.out.println("Width of the box is :  "+width);
        System.out.println("Depth of the box is : "+depth+"\n");
    }
}

public class MainBox
{
    public static void main(String[] args)
    {
        Box a = new Box(6, 9, 4);
        a.Display();
        Box b = new Box(4, 2, 4);
        b.Display();
        Box c = new Box(9, 8, 9);
        c.Display();
```

```
        float A = a.Area(10, 9, 8);
        System.out.println("Area of the box 1 is : "+A);
        float B = b.Area(6, 5, 4);
        System.out.println("Area of the box 2 is : "+B);
        float C = c.Area(2, 3, 1);
        System.out.println("Area of the box 3 is : "+C);
        Box.DisplayCount();
    }
}
```