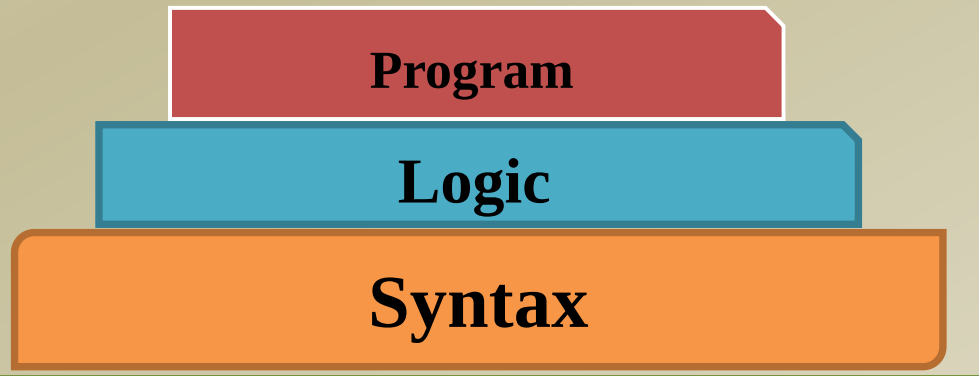
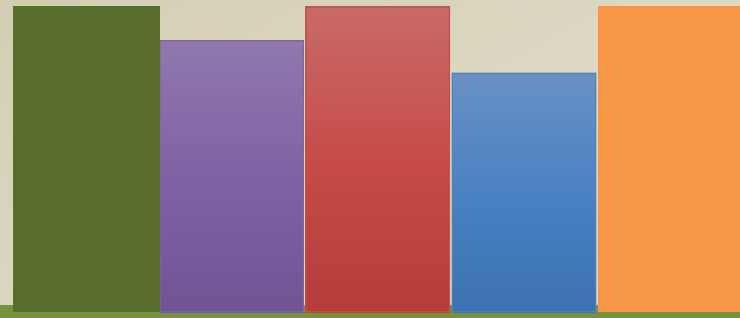
Code at Random (OPC) PVT. LTD.

Module 7: Board Questions- Overloading Based





- Design a class to overload a function **series ( )** as follows: **[2019]**

(a) void series (int x, int n) – To display the sum of the series given below:

$x^1 + x^2 + x^3 + \ldots\ldots\ldots\ldots\ldots x^n$ terms

(b) void series (int p) – To display the following series:

0, 7, 26, 63 ……. p terms

(c) void series ( ) – To display the sum of the series given below:

1/2 + 1/3 + 1/4 . . . . . 1/10

- Design a class to overload a function **volume( )** as follows: **[2018]**

(i) double volume (double R) - with radius(R) as an argument, returns the volume of sphere using the formula.

$v = 4/3 \times 22/7 \times R^3$

(ii)double volume (double H, double R) - with height(H) and radius(R) as the arguments, returns the volume of a cylinder using the formula. $v = 22/7 \times R^2 \times H$

(iii)double volume (double L, double B, double H) - with length(L), breadth(B) and Height(H) as the arguments, returns the volume of a cuboid using the formula.

$V=L \times B \times H$

```
class Overload {
   public static void series (int x , int n) {
      double sum=0.0;
      for (int i=1;i<=n;i++) {
         sum=sum+ Math.pow(x,i);
      }
    System.out.println(sum);
 }
 public static void series (int p) {
    for (int i=1; i<=p; i++)
      System.out.println((i*i*i)-1);
 }
 public static void series () {
   double sum=0.0;
   for (int i=2; i<=10;i++) {
      sum=sum+(double)1/i;
    }
 System.out.print("Sum= "+sum);
 }
}
```

```
import java .io.*;
public class mensuration {
   double volume(double R)
   {
      double V= 4.0/3* 22.0/7*Math.pow(R,3);
       return V;
   }
   double volume( double H,double R)
   {
     double V= 22.0/7 * Math.pow(R,2) *H;
     return V;
   }
  double volume( double L, double B , double H)
   {
     double V = L*B*H;
     return V;
   }
}
```