TOPIC **: METHOD OVERLOADING**

Different ways to overload the method

There are two ways to overload the method in java

1. By changing number of arguments
2. By changing the data type

NOTE: Java compiler renders compiler time error if you declare the same method having same parameters.

By changing number of arguments

```
class Adder{

    static int add(int a,int b){return a+b;}
    static int add(int a,int b,int c){return a+b+c;}
    }
    class TestOverloading1{
    public static void main(String[] args){
    System.out.println(Adder.add(11,11));
    System.out.println(Adder.add(11,11,11));
    }}
```

By changing the data type

```
class Adder{
static int add(int a, int b){return a+b;}
static double add(double a, double b){return a+b;}
}
class TestOverloading2{
public static void main(String[] args){
System.out.println(Adder.add(11,11));
System.out.println(Adder.add(12.3,12.6));
}}
```

Find output of following code ?

Question 1

```
class MethodOverloading
{
   public static void main(String[] args)
   {
      int a = 12;
      double b = 13;
      double c = m(a, b);
      double d = m(c, a);
      double e = m(a, (int) d);
      System.out.println("c = " + c + " d = " + d + " e = " + e);
   }     public static double m(int x, double y)
   {
      return x + y;}
   public static double m(double x, double y)
   {
      return x - y;
   }public static double m(int x, int y)
   {
      return x % y;
   }
}
```

Question 2

```
public class Test
{
   public int getData() //getdata() 1
   {
      return 0;
   }
   public long getData() //getdata() 2
   {
      return 1;
   }
   public static void main(String[] args)
   {
      Test obj = new Test();
      System.out.println(obj.getData());
   }
}
```