Name : KUSUM.M.R
USN: 1BM19CS077

24/11/2020

Lab 7: Program to demonstrate generics with multiple object parameters

```
import java.util.*;
class Gener<T,U,V>
{
    T usn;
    U attendance;
    V cgpa;
    Gener(T n, U a, V c)
    {
        usn = n;
        attendance = a;
        cgpa = c;
    }
    void display()
    {
        System.out.println("==========");
        System.out.println("USN of student: "+usn);
        System.out.println("Attendance = "+attendance);
        System.out.println("CGPA = "+cgpa);
    }
}
```

```
class GenDemo
{
    public static void main (String args[])
    {
        Scanner in = new Scanner(System.in);
        String USN;
        int attd;
        double cg;
        System.out.println(" Enter the USN of the student: ");
        USN = in.next();
        System.out.println (" Enter the attendance % of the
         student: ");
        attd = in.nextInt();
        System.out.println ("Enter the CGPA of the student: ");
        cg = in.nextDouble();
        Gener <String, Integer, Double> ob = new Gener <String,
                        Integer, Double> (USN, attd, cg);

        ob.display();
    }
}
```

Lab 8: Demonstrate handling of exceptions in inheritance tree.

```
import java.util.Scanner;
class WrongAge extends Exception {
    int age;
    WrongAge(int x) {
        age = x;
    }
    public String toString() {
        return "AGE OF SON=" + age + "IS INVALID";
    }
}
```

```
class Father {
    int a;
    Father (int x) {
      a=x;
      }
  }
class Son extends Father {
    int age;
  Son (int fage, int sage) {
      super(fage);
      age = sage;
    }
  void compute() throws WrongAge {
    if (age >= a) {
      throw new WrongAge(age);
    }
    else {
    System.out.println ("THE AGES ARE VALID");
    System.out.println ("FATHER'S AGE=" + a + "\t" +
                        "SON'S AGE =" + age);
       }
  }
}
class ExceptionsMain {
    public static void main (String args[]) {
      Scanner s= new Scanner (System.in);
      System.out.println (" ENTER FATHER'S AGE: ");
       int f= s.nextInt();
      System.out.println ("ENTER SON'S AGE:");
        int so = s.nextInt();
      Son ss = new Son (f,so);
      try {
          ss.compute();
      } catch (WrongAge e){
          System.out.println (e);
  }
}
```