

24-11-2020.

Generics - Demo.

```
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();
```

```
Genus <String, Integer, Double> ob = new
```

```
Genus <String, Integer, Double> (USN, att, cg);
```

```
ob.display();
```

```
}
```

```
}
```

Exception:- Father & Son.

```
import java.util.*;
```

```
class AgeException extends Exception
```

```
{
```

```
    public String toString()
```

```
    { return "Age of son and father cannot be  
less than 0 as well Age of the son cannot be  
more than age of father or illegal marriage";
```

```
}
```

```
}
```

```
class Father
```

```
{ int age;
```

```
Scanner in = new Scanner(System.in);
```

```
Father()
```

```
{ System.out.println("Enter the father's age");
```

```
age = in.nextInt();
```

```
}
```

```
}
```



```
class Son extends Father
```

```
{  
    int sage;
```

```
    Scanner in = new Scanner (System.in);
```

```
    Son ()
```

```
    {  
        System.out.println(" Enter the son's age");
```

```
        sage = in.nextInt();
```

```
    }  
}
```

```
}
```

```
class FSEn
```

```
{  
    static void WrongAge (int f, int s) throws
```

AgeException

```
    {  
        if (f < 0 || s < 0 || f - s < 21)
```

```
            throw new AgeException();
```

```
            System.out.println(" No logical or legal  
            problems arise");
```

```
    }  
}
```

```
public static void main (String args[])
```

```
{
```

```
    Son ob = new Son();
```

```
    try
```

```
    {  
        WrongAge (ob.fage, ob.sage);
```

```
    }  
    catch (AgeException e)
```

```
    {  
        System.out.println(" Exception arise: " +  
        e); }  
}
```

```
}
```