Ex No: 09

Date:

20/09/2019

MAXIMUM OF N ELEMENTS USING GENERIC FUNCTION

Aim:

*To create a java program to find the maximum of n elements using generic function.

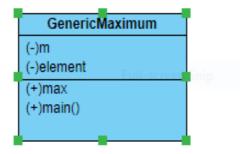
Requirements:

* Write a java program to find the maximum value from the given type of elements using a generic function.

Algorithm:

- 1. Create a package maximum.
- 2. Create a class GenericMaximum in the above package.
- 3. Generate the generic methods to the program.
- 4. Declare for loop to compare the elements.
- 5. Declare array list for integer, double and string.
- 6. Give the required array for integer, double and string.
- 7. Print the maximum value of integer, double and string.
- 8. Stop.

Class Diagram:



```
Program:
*Developed by
*U.Tam ilSelvan
*212217105058
*Saveetha Engineering College
package maximum;
public class GenericM axim um {
      public static < E extends Com parable < E >> E m ax(E[]ele)
             Em;
                   m = e le [0];
                   for(E e:ele)
                   {
                          if(e.com pareTo(m)>0) {
                                m = e;
                          }
                   }
                   retum m;
      }
      public static void m ain (String[] args) {
             //TODO Auto-generated m ethod stub
             Integer[] in tA rray= \{1,2,3,4,5,6,7\};
             Double[] doubleA may= {1.1,2.2,3.3,4.4,5.5,6.6,7.7};
             String[] strA may=
{ "Mahendra", "Singh", "Dhoni", "Sachin", "Tendulkar"};
             Integer in tM ax;
             Double doubleMax;
             String strMax;
             intMax = max(intArray);
             doubleM ax= m ax (doubleA rray);
             strM ax = m ax (strA rray);
             System .out.println ("Max Integer:"+ intMax);
             System .out.println ("Max Double:"+ doubleMax);
             System .out.println ("Max String:"+ strMax);
```

```
}
```

Output:

M ax Integer:7 M ax D ouble:7.7 M ax String:Tendulkar

Result:

*Thus the java program to find the maximum of n elements using generic function is written and executed successfully.