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.

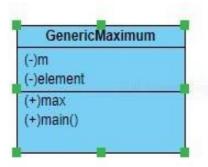
#### Requirements:

\* 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:
/**
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package m axim um ;
public class GenericMaxim um {
      public static < E extends Com parable < E >> E m ax(E[]ele)
            Em;
      m = e le [0];
                   for(E e:ele)
                   {
                          \mathbf{if}(e.com pareTo(m)>0) {
                                m = e;
                          }
                   }
                   return m;
      }
      public static void m ain (String[] args) {
             //TODO Auto-generated method stub
             Integer[] in tA may= \{2,7,6,21,40\};
            Double[] doubleA may= {1.0,50.7,1.5,20.4,46.2};
             String [] strA may=
      {"suri","vox","problem ","eee","subject"};
             Integer in tM ax;
            Double doubleMax;
            String strMax;
             intMax = max(intAmay);
doubleMax= m ax(doubleArray);
             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:

```
Intger Max=40
Double Max=50.7
String Max=vox
```

#### Result:

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