

EX: 09**19-09-19**

MAXIMUM OF N ELEMENTS USING GENERIC FUNCTIONS

Aim:

To develop a java application to find the maximum value from the given type of elements using a generic function.

Algorithm:

Step 1: Create a package genericfunctions.

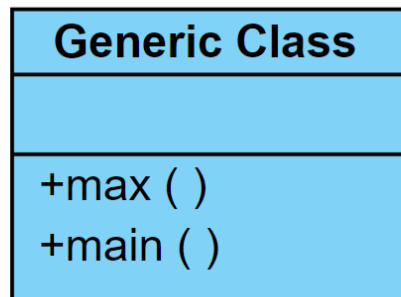
Step 2: Declare class GenericClass with main function.

Step 3: Create a generic method to find the maximum value out of the element list.

Step 4: Display the maximum value from given type of element array.

Step 5: Stop

Class Diagram:



Program:

GenericClass.java

```
/*developed by: Sanjai Kumar  
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*/
```

```
package genericfucntions;
```

```
public class GenericClass {  
    public static <T extends Comparable<T>> T max (T[] element)  
    { T m;  
      m=element[0];  
      for(T e:element)  
      {  
          if(e.compareTo(m)>0)  
              m=e;  
      }  
      return m;  
    }  
}
```

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

```
Integer[] intArray= {1,2,3,4,5};
Integer intMax;
Double[] doubleArray= {1.1,2.2,3.3,4.4};
Double doubleMax;
String[] strArray=
{"apple", "orange", "banana", "welcome"};
String strMax;
intMax=max(intArray);
System.out.println("Max integer: "+intMax);
doubleMax=max(doubleArray);
System.out.println("Max double: "+doubleMax);
strMax=max(strArray);
System.out.println("Max string: "+strMax);
    }
}
```

Output:

Max integer: 5
Max double: 4.4
Max String: Welcome

Result:

Thus a java console application that finds the maximum value from given type of elements is verified.