MAXIMUM OF N ELEMENTS USING GENERIC FUNCTION

Aim:

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

Algorithm:

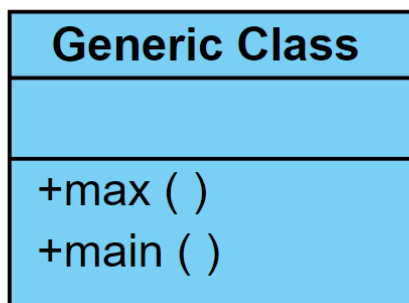**Step 1:** Create a package genericfunctions.

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:

```java
/**
 * Program to create Generic Function
 * created by rohitha
 * gmail : rohithakorrapati21@gmail.com
 */
package GenericFunction;

public class GenericElements {
    public static <T extends Comparable<T>> T max (T[] element)
    { T m;
      m=element[0];
```

```java
        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.