

Ex No: 09	<b>MAXIMUM OF N ELEMENTS USING GENERIC FUNCTION</b>
Date: 20/09/2019	

### Aim:

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

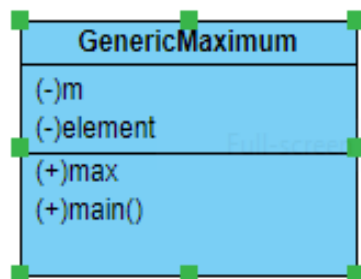
### Requirements:

\* 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 maximum;

public class GenericMaximum {

    public static <E extends Comparable<E>> E max(E[] ele)
    {
        E m;
        m=ele[0];
        for(E e:ele)
        {
            if(e.compareTo(m)>0) {
                m=e;
            }
        }
        return m;
    }

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        Integer[] intArray= {1,2,3,4,5,6,7};
        Double[] doubleArray= {1.1,2.2,3.3,4.4,5.5,6.6,7.7};
        String[] strArray=
{"Mahendra","Singh","Dhoni","Sachin","Tendulkar"};

        Integer intMax;
        Double doubleMax;
        String strMax;

        intMax=max(intArray);
        doubleMax=max(doubleArray);
        strMax=max(strArray);

        System.out.println("Max Integer:"+intMax);
        System.out.println("Max Double:"+doubleMax);
        System.out.println("Max String:"+strMax);
    }
}
```

```
    }  
}
```

### Output:

```
Max Integer:7  
Max Double:7.7  
Max String:Tendulkar
```

### Result:

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