

<b>Ex.No: 10</b>	<b>Java Application for Generic Max Finder</b>
<b>Date:</b>	

**Aim:**

To create a Java console application that finds the maximum in a array based on the type of the elements using generic functions in java.

**Algorithm:**

- Step 1 Start the Process
- Step 2 Create a array of number and array of strings and pass it to generic function.
- Step 3 If the array is Integer type
  - Step 3.1 Assume first element as MAX
  - Step 3.2 Compare [Numeric Perspetive] this element with MAX
  - Step 3.3 If it is greater than MAX then store current element as MAX
  - Step 3.4 Else do nothing
  - Step 3.5 Goto step 3.1 until all the elements has been processed.
- Step 4 If the array is String type
  - Step 4.1 Assume first element as MAX
  - Step 4.2 Compare [Dictionary Perspective] this element with MAX
  - Step 4.3 If it is greater than MAX then store current element as MAX
  - Step 4.4 Else do nothing
  - Step 4.5 Goto step 3.1 until all the elements has been processed.
- Step 5 Stop the Process

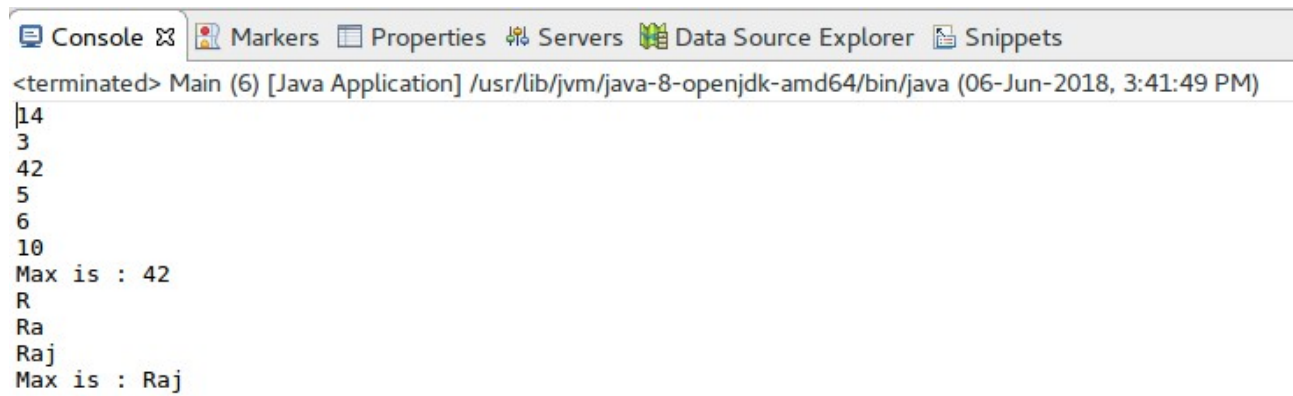
**Coding:**

```
class GenericMax {
    public <T extends Comparable<T>> void maxFinder (T[] array){
        T max = array[0];
        for(T element: array){
            System.out.println(element);
            if(element.compareTo(max) > 0)
                max = element;
        }
        System.out.println("Max is : "+max);
    }
}

public class Main {

    public static void main(String[] args) {
        GenericMax max = new GenericMax();
        Integer[] numbers = {14,3,42,5,6,10};
        String[] strings = {"R","Ra","Raj"};
        max.maxFinder(numbers);
        max.maxFinder(strings);
    }
}
```

## Output:



The screenshot shows an IDE console window with the following tabs: Console, Markers, Properties, Servers, Data Source Explorer, and Snippets. The console output is as follows:

```
<terminated> Main (6) [Java Application] /usr/lib/jvm/java-8-openjdk-amd64/bin/java (06-Jun-2018, 3:41:49 PM)
14
3
42
5
6
10
Max is : 42
R
Ra
Raj
Max is : Raj
```

## Result:

The java console application for finding generic max of given elements was developed and tested successfully.