Assignment ~ 7

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Generic

Write a generic method to find the maximal element in the range [begin, end] of a list.

input :-

{2, 62, 4, 78, 6, 10, 49, 20, 59, 43, 29, 30, 56, 89}

output :-

89.

```
import java.io.*;
import java.util.*;
 class newex
{
public static <T extends object & compara-
ble < ? super T >> T getMax(List < ? exten-
ds T > list, int begin, int end)
  {
T maxelem = list.get(begin);
 for(++begin; begin<end; ++begin)
if(maxelem.compareTo(list.get(begin)>
          0<0)
maxelem = list.get(begin);
  return maxelem;
 }
public static void main(string args[])
 {
List <Integer> arr = Arrays.asList(2,62,
      4, 78,6,10,49,20,59,43,29,30,56,89);
int x = newx, getmax(arr,0,arr.size());
system.out.println("Maximal number:" +x);
  }
  {
```

maximal number = 89.

2] Write a generic method to count the no. of elements in a collection that have a specific property (for example, odd integers, even number)

input :-
{2, 4, 6, 7, 8, 9, 90, 78, 41, 56, 79, 45, 65, 85}

Output :
even : 7
odd : 7

→

```
import java.util.*;
public class Evenodd
  {
public static void main(string [] args)
 {
int [] nums = {2, 4, 6, 7, 8, 9, 90, 78, 41, 56,
      79, 45, 65, 85}
int arr ctr-even=0, ctr-odd=0;
System.out.println("original Array:"
  + Arrays.Tostring(nums));
for(int i=0; i<nums.length; i++)
 {
 if(nums[i] % 2 ==0)
  {
   ctr-even++;
}
  else
   ctr-odd++;
  }
```

```
System.out.println("\n Number of even elements
    nts in the array: %d", ctr-even)
System.out.println("\n Number of odd elements
    nts in the array: %d", ctr-odd;
    System.out.println("\n");
    }
}
```

Output:

Original Array: [2, 4, 6, 7, 8, 9, 90, 78, 41, 56, 79, 45, 65, 85]

No. of even elements in the array: 7

No. of odd elements in the array: 7