

Placement Preparation Test 11

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Q.1) Print 2nd largest and 2nd smallest elements from a given integer array 'arr' of size arr_len in a single loop.

```
package test11;

public class Ques1 {

    public static void main(String[] args) {

        int arr[] = {5,10,0,2,3,4};

        int firstMin=Integer.MAX_VALUE;
        int secondMin=Integer.MAX_VALUE;

        int firstMax=Integer.MIN_VALUE;
        int secondMax=Integer.MIN_VALUE;

        for(int num:arr)
        {
            if(num<firstMin)
            {
                secondMin=firstMin;
                firstMin=num;
            }
            else if(num<secondMin && num!=firstMin)
            {
                secondMin=num;
            }

            if(num>firstMax)
            {
                secondMax=firstMax;
                firstMax=num;
            }
            else if(num>secondMax && num!=firstMax)
            {
                secondMax=num;
            }
        }

        System.out.println("Second Highest is : "+secondMax);
        System.out.println("Second Lowest is : "+secondMin);
    }
}
```

Q.2) Given 2 sorted arrays of integers, print common elements between 2 arrays in single loop. Method Signature void printCommon(int[] arr1, int [] arr2, int arr1_len, int arr2_len) { }

```
package test11;

public class Ques2 {

    public static void main(String[] args) {
        int arr1[] = {1,3,4,5,7} ;
        int arr2[] = {2,3,5,6} ;

        int i=0;
        int j=0;
        while(i<arr1.length && j<arr2.length )
        {
            if(arr1[i]==arr2[j])
            {
                System.out.print(arr1[i]+" ");
                i++;
                j++;
            }
            else if(arr1[i]<arr2[j])
            {
                i++;
            }
            else
            {
                j++;
            }
        }
    }
}
```