

- 1) Print 2nd largest and 2nd smallest elements from a given integer array 'arr' of size arr_len in a single loop. Method Signature void print2nd(int arr[], int arr_len) { //Your code here } Example 1 Input: arr[]: 5, 10, 0, 2, 3, 4 arr_size = 6 Output: 2, 5

```
package mypack;
```

```
public class ninetest
```

```
{
```

```
    public static void print(int arr[], int arr_len)
```

```
    {
```

```
        int first_min = Integer.MAX_VALUE;
```

```
        int second_min = Integer.MAX_VALUE;
```

```
        int first_max = Integer.MIN_VALUE;
```

```
        int second_max = Integer.MAX_VALUE;
```

```
        for(int i:arr)
```

```
        {
```

```
            if(i<first_min)
```

```
            {
```

```
                second_min = first_min;
```

```
                first_min = i;
```

```
            }
```

```
            else if(i<second_min && i!=first_min)
```

```
            {
```

```
                second_min = i;
```

```
            }
```

```
        }
```

```
        for(int i: arr)
```

```

        {
            if(i>first_max)
            {
                second_max = first_max;
                first_max = i;
            }
            else if(i>second_max && i!=first_max)
            {
                second_max = i;
            }
        }

        System.out.println("Second largest is: " + second_max);
        System.out.println("Second smallest is: " + second_min);
    }

    public static void main(String[] args)
    {
        int arr[]={ 5, 10, 0, 2, 3, 4};
        int arr_size = 6;
        print(arr,arr_size);

    }

}

```

- 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 mypack;

```
public class ninetest
{
    public static void printCommon(int[] arr1, int [] arr2, int arr1_len, int arr2_len)
    {
        int i=0;
        int j=0;

        while(i<arr1_len && j<arr2_len)
        {
            if(arr1[i] == arr2[j])
            {
                System.out.print(arr1[i]);

                i++;
                j++;
            }
            else if(arr1[i]<arr2[j])
            {
                i++;
            }
            else
            {
                j++;
            }
        }
    }
}
```

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

}

}
```