

JAVA Logic Placement Preparation Test 3

Q.1) Segregate positive and negative integers in linear time Given an array of positive and negative integers, . The output should print all negative numbers, followed by all positive numbers. For example, Input: [19, -13, 15, -12, -18, -16, 1, 3] Output: [-13, -12, -18, -16, 15, 19, 1, 3] After showing above output copy this data into another array and sort it.

Ans:- public class Q1{

```
    public static int[] Segregate(int[] arr){
```

```
        int n = arr.length;
```

```
        int [] result = new int[n];
```

```
        int left = 0, right = n - 1;
```

```
        for(int num : arr){
```

```
            if(num<0){
```

```
                result[left++] = num;
```

```
            } else{
```

```
                result[right--] = num;
```

```
            }
```

```
        }
```

```
        return result;
```

```
    }
```

```
    public static void main(String args[]){
```

```
        int[] arr = {19, -13, 15, -12, -18, -16, 1, 3};
```

```
        int[] segregated = Segregate(arr);
```

```
        for(int num : segregated){
```

```
            System.out.println(num + " ");
```

```
        }
```

```
    }
```

```
}
```

Q.2) Accept 5 number in an array, accept a number from user and check if given number is there in an array or not

Ans:- public class Q2 {

```
    public static void main(String[] args) {  
        Scanner sc = new Scanner(System.in);  
        int[] numbers = new int[5];  
        System.out.println("Enter 5 numbers:");  
        for (int i = 0; i < 5; i++) {  
            numbers[i] = sc.nextInt();  
        }  
        System.out.println("Enter a number to check: ");  
        int numberToCheck = sc.nextInt();  
        boolean found = false;  
        for (int num : numbers) {  
            if (num == numberToCheck) {  
                found = true;  
                break;  
            }  
        }  
        if (found) {  
            System.out.println(numberToCheck + " is in the array.");  
        } else {  
            System.out.println(numberToCheck + " is not in the array.");  
        }  
        sc.close();  
    }  
}
```