Set1-Q-1

```
public class Question1 {

	public static int[] segregateNegatives(int arr[]) {
		int result[]=new int[arr.length];
		int left=0,right=arr.length-1;

		for(int i=0;i<arr.length;i++) {
			if(arr[i]<0)
				result[left++]=arr[i];
			else
				result[right--]=arr[i];
		}

		return result;
	}

	public static void main(String[] args) {
		// TODO Auto-generated method stub
		int arr[]= {19, -13, 15, -12, -18, -16, 1, 3};
		int res[]=segregateNegatives(arr);
		for(int num:res)
			System.out.print(num+" ");
	}

}
```

Set1-Q-2

```
public class Question2 {
	public static int linearSerach(int arr[],int key) {
		for(int i=0;i<arr.length;i++) {
			if(arr[i]==key)
				return i;
		}

		return -1;
	}

	public static void main(String[] args) {
		// TODO Auto-generated method stub

		int arr[]= {2,1,9,7,6,5,3};
		int key=6;
		int index=linearSerach(arr,key);

		if(index!=-1)
			System.out.println("Element found at index: "+index);
		else
			System.out.println("Element not found");
	}

}
```

Set2-Q-1

```
public class Question3 {

	public static int[] segregateEvenOdd(int arr[]) {
		int result[]=new int[arr.length];
		int left=0,right=arr.length-1;

		for(int i=0;i<arr.length;i++) {
			if(arr[i]%2==0)
				result[left++]=arr[i];
			else
				result[right--]=arr[i];
		}

		return result;
	}

	public static void main(String[] args) {
		// TODO Auto-generated method stub

		int arr[]= {1,2,3,4,5,6,7,8,9};
		int res[]=segregateEvenOdd(arr);
		for(int num:res)
			System.out.print(num+" ");
	}

}
```

Set2-Q-2

```
import java.util.Arrays;

public class Question4 {

	public static int binarySearch(int arr[],int key) {
		Arrays.sort(arr);
		int start=0,end=arr.length-1;

		while(start<=end) {
			int mid=(start+end)/2;
			if(arr[mid]==key)
				return mid;
			else if(arr[mid]>key)
				end=mid-1;
```

```
                else
                        start=mid+1;
        }

        return -1;
    }

    public static void main(String args[]) {

        int arr[]= {1,3,5,6,7,9};
        int key=6;

        int index=binarySearch(arr,key);
        if(index!=-1)
            System.out.println("Element found at index: "+index);
        else
            System.out.println("Element not found");
    }
}
```