

```

import java.util.Scanner;

public class SelectionSort {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter the number of elements: ");

        int n = scanner.nextInt();

        int[] arr = new int[n];

        System.out.println("Enter the elements:");

        for (int i = 0; i < n; i++) {

            arr[i] = scanner.nextInt();

        }

        System.out.println("Original Array:");

        printArray(arr);

        selectionSortAscending(arr);

        System.out.println("\nSorted Array (Ascending):");

        printArray(arr);

        selectionSortDescending(arr);

        System.out.println("\nSorted Array (Descending):");

        printArray(arr);

    }

    public static void selectionSortAscending(int[] arr) {

        int n = arr.length;

        for (int i = 0; i < n - 1; i++) {

            int minIndex = i;

            for (int j = i + 1; j < n; j++) {

                if (arr[j] < arr[minIndex]) {

```

```

        minIndex = j;
    }
}
if (minIndex != i) {
    int temp = arr[i];
    arr[i] = arr[minIndex];
    arr[minIndex] = temp;
}
}
}

```

```

public static void selectionSortDescending(int[] arr) {
    int n = arr.length;

    for (int i = 0; i < n - 1; i++) {
        int maxIndex = i;
        for (int j = i + 1; j < n; j++) {
            if (arr[j] > arr[maxIndex]) {
                maxIndex = j;
            }
        }
        if (maxIndex != i) {
            int temp = arr[i];
            arr[i] = arr[maxIndex];
            arr[maxIndex] = temp;
        }
    }
}

```

```

public static void printArray(int[] arr) {
    for (int num : arr) {

```

```
        System.out.print(num + " ");  
    }  
    System.out.println();  
}  
}  
←-----OUTPUT-----→
```

Enter the number of elements: 3

Enter the elements:

2

4

3

Original Array:

2 4 3

Sorted Array (Ascending):

2 3 4

Sorted Array (Descending):

4 3 2