public class SelectionSort {

public static void selectionSort(int[] arr) {

int n = arr.length;

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

int minIndex = i;

// Find the minimum element in the unsorted part of the array

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

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

minIndex = j;

}

}

// Swap the minimum element with the first element of the unsorted part

int temp = arr[minIndex];

arr[minIndex] = arr[i];

arr[i] = temp;

}

}

public static void main(String[] args) {

int[] arr = { 64, 25, 12, 22, 11 };

System.out.println("Array before sorting:");

printArray(arr);

selectionSort(arr);

System.out.println("Array after sorting:");

printArray(arr);

}

public static void printArray(int[] arr) {

for (int i = 0; i < arr.length; i++) {

System.out.print(arr[i] + " ");

}

System.out.println();

}

}