```
import java.util.Scanner;
public class sort_array {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        sort_array(input.nextInt());
        for (int i = 0; i<size; i++) {
            add(input.nextInt());
        sort();
        print();
        input.close();
    }
    static int[] arr;
    static int top, size, capacity;
    static sort_array(int capacity) {
        this.capacity = capacity;
        top = -1;
        size = 0:
        arr = new int[capacity];
    }
    private static void add(int item) {
        if (is_full()) {
            return;
        size++;
        arr[++top] = item;
        return;
    }
    public static boolean is_full() {
        return size == capacity;
    }
    public static boolean is_empty() {
        return size == 0;
    public static void print() {
        if (is_empty()) {
            return;
```

```
for (int i = top; i >= 0; i--) {
             System.out.print(arr[i] + " ");
         }
    }
    public static void sort() {
         if (is_empty()) {
             return;
        for (int i = 1; i < size; i++) {
             int j = i;
             if (arr[j] < arr[j-1]) {
                  while (j>0 && arr[j] < arr[j-1]) {
                      swap(arr, j, j-1);
                  }
             }
        }
    }
    public static void swap(int[] arr, int i, int j) {
         int t = arr[i];
         arr[i] = arr[j];
         arr[j] = t;
    }
}
```