```java
import java.util.Scanner;

public class sortingBubbleSort {

    public static void main(String[] args) {

        Scanner input = new Scanner(System.in);

        System.out.print("Masukkan jumlah elemen array: ");
        int n = input.nextInt();

        int[] data = new int[n];

        System.out.println("Masukkan elemen-elemen array:");
        for (int i = 0; i < n; i++) {
            System.out.print("Elemen ke-" + (i + 1) + ": ");
            data[i] = input.nextInt();
        }

        System.out.println("\nData sebelum diurutkan:");
        tampilkanArray(data);

        bubbleSort(data);
```
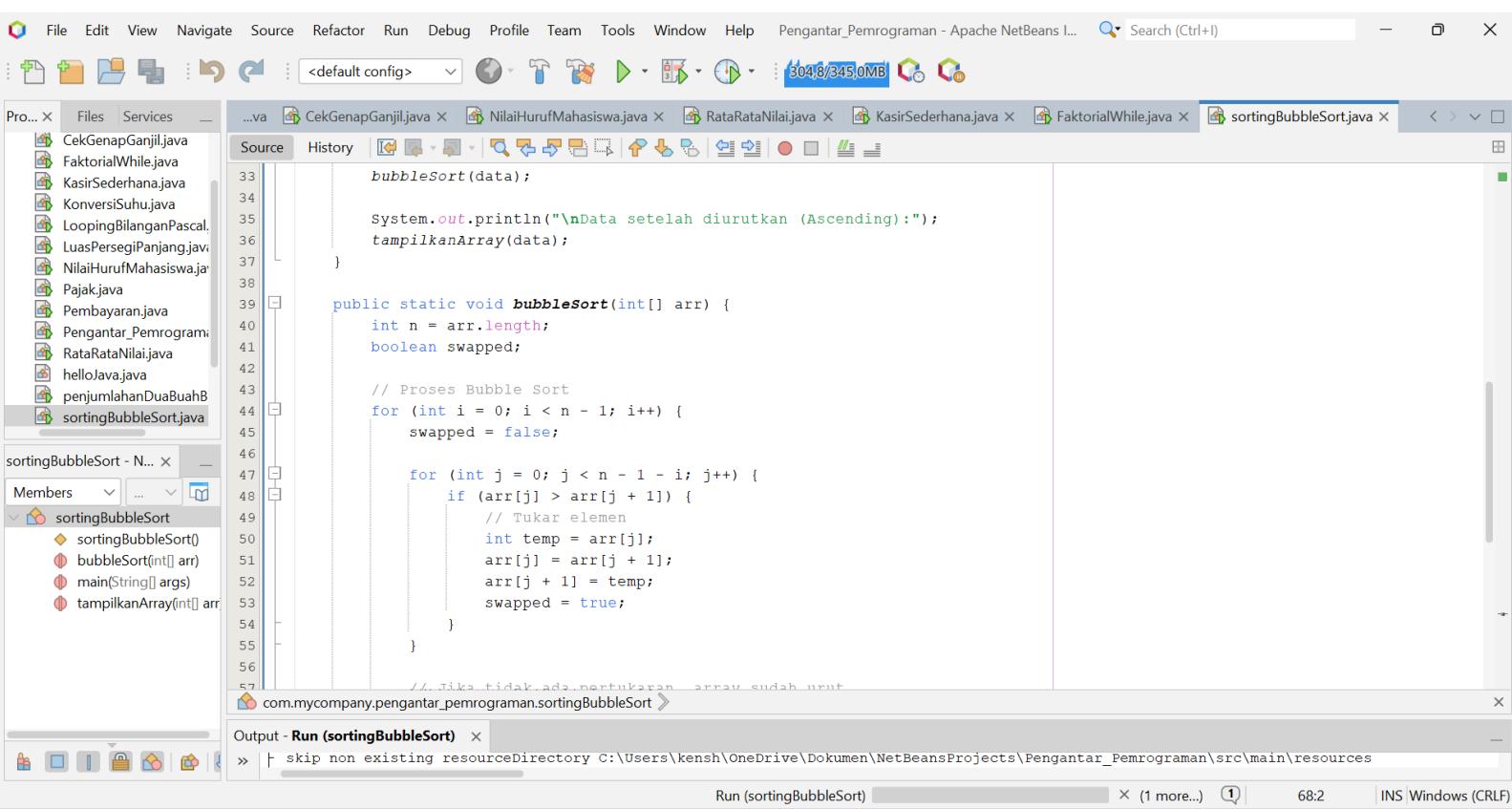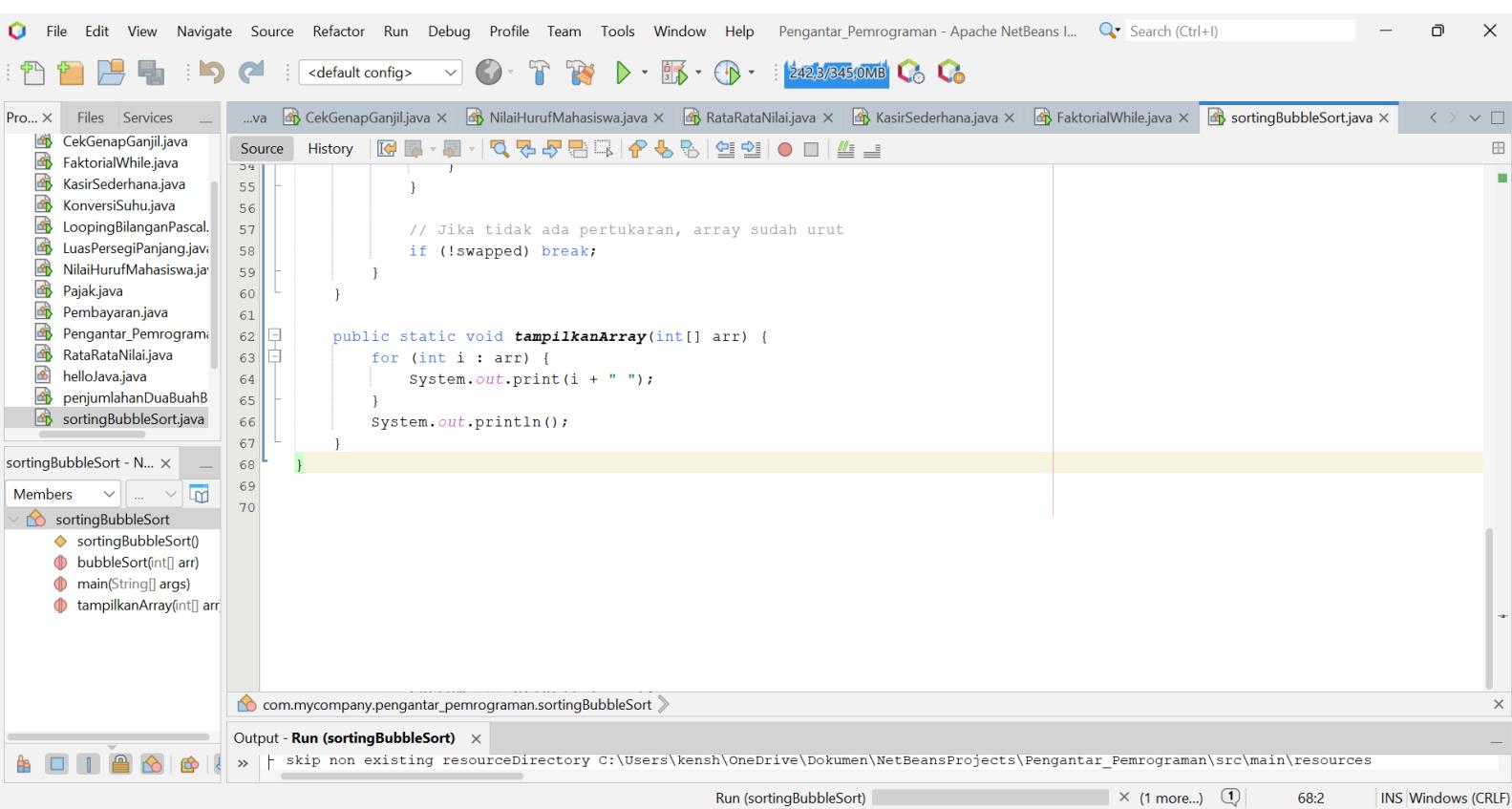
com.mycompany.pengantar_pemrograman.sortingBubbleSort

Output - Run (sortingBubbleSort)

skip non existing resourceDirectory C:\Users\kensh\OneDrive\Dokumen\NetBeansProjects\Pengantar_Pemrograman\src\main\resources

File   Edit   View   Navigate   Source   Refactor   Run   Debug   Profile   Team   Tools   Window   Help

`<default config>`

304.8/345.0MB

...va   CekGenapGanjil.java ✕   NilaiHurufMahasiswa.java ✕   RataRataNilai.java ✕   KasirSederhana.java ✕   FaktorialWhile.java ✕   sortingBubbleSort.java ✕

Source   History

```java
33            bubbleSort(data);
34
35            System.out.println("\nData setelah diurutkan (Ascending):");
36            tampilkanArray(data);
37        }
38
39        public static void bubbleSort(int[] arr) {
40            int n = arr.length;
41            boolean swapped;
42
43            // Proses Bubble Sort
44            for (int i = 0; i < n - 1; i++) {
45                swapped = false;
46
47                for (int j = 0; j < n - 1 - i; j++) {
48                    if (arr[j] > arr[j + 1]) {
49                        // Tukar elemen
50                        int temp = arr[j];
51                        arr[j] = arr[j + 1];
52                        arr[j + 1] = temp;
53                        swapped = true;
54                    }
55                }
57                // Jika tidak ada pertukaran, array sudah urut
```

com.mycompany.pengantar_pemrograman.sortingBubbleSort

Output - Run (sortingBubbleSort)

```
» | skip non existing resourceDirectory C:\Users\kensh\OneDrive\Dokumen\NetBeansProjects\Pengantar_Pemrograman\src\main\resources
```

Run (sortingBubbleSort)   ✕   (1 more...)   ①   68:2   INS   Windows (CRLF)

Project panel (left side):

Pro... ✕   Files   Services

sortingBubbleSort - N... ✕

Members

- CekGenapGanjil.java
- FaktorialWhile.java
- KasirSederhana.java
- KonversiSuhu.java
- LoopingBilanganPascal.
- LuasPersegiPanjang.java
- NilaiHurufMahasiswa.ja
- Pajak.java
- Pembayaran.java
- Pengantar_Pemrogram
- RataRataNilai.java
- helloJava.java
- penjumlahanDuaBuahB
- sortingBubbleSort.java

- sortingBubbleSort
  - sortingBubbleSort()
  - bubbleSort(int[] arr)
  - main(String[] args)
  - tampilkanArray(int[] arr

```
                                }

        // Jika tidak ada pertukaran, array sudah urut
        if (!swapped) break;
                            }

    }

    public static void tampilkanArray(int[] arr) {
        for (int i : arr) {
            System.out.print(i + " ");
        }
        System.out.println();
    }

}
```

com.mycompany.pengantar_pemrograman.sortingBubbleSort

Output - Run (sortingBubbleSort)

skip non existing resourceDirectory C:\Users\kensh\OneDrive\Dokumen\NetBeansProjects\Pengantar_Pemrograman\src\main\resources

Run (sortingBubbleSort)   (1 more...)   68:2   INS   Windows (CRLF)

```
44      for (int i = 0; i < n - 1; i++) {
45          swapped = false;
46
47          for (int j = 0; j < n - 1 - i; j++) {
48              if (arr[j] > arr[j + 1]) {
```

com.mycompany.pengantar_pemrograman.sortingBubbleSort

Output - Run (sortingBubbleSort)

```
--- exec:3.1.0:exec (default-cli) @ Pengantar_Pemrograman ---
Masukkan jumlah elemen array: 5
Masukkan elemen-elemen array:
Elemen ke-1: 10
Elemen ke-2: 15
Elemen ke-3: 20
Elemen ke-4: 25
Elemen ke-5: 30

Data sebelum diurutkan:
10 15 20 25 30

Data setelah diurutkan (Ascending):
10 15 20 25 30
------------------------------------------------------------------------
BUILD SUCCESS
------------------------------------------------------------------------
Total time:  15.402 s
Finished at: 2025-11-15T21:09:28+07:00
------------------------------------------------------------------------
```

Run (FaktorialWhile)   68:2   INS