

Nama : Ferza Reyaldi
Kelas : 2 TI Reguler A
NIM : 09021281924060

Bubble Sort

```
/*
 * To change this license header, choose License Headers in Project
Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package alproii012120;

/**
 *
 * @author Ferza Reyaldi
 */
public class Sorting {

    static void ascendingBubbleSort(int array[])
    {
        int n = array.length;
        int temp = 0;
        for (int i = 0; i < n; i++)
        {
            for (int j = 0; j < n-i-1; j++)
            {
                if (array[j] > array[j+1])
                {
                    temp = array[j+1];
                    array[j+1] = array[j];
                    array[j] = temp;
                }
            }
        }
    }

    static void descendingBubbleSort(int array[])
    {
        int n = array.length;
        int temp = 0;
        for (int i = 0; i < n; i++)
        {
            for (int j = 0; j < n-i-1; j++)
            {
                if (array[j] < array[j+1])
                {
                    temp = array[j+1];
                    array[j+1] = array[j];
                }
            }
        }
    }
}
```

```

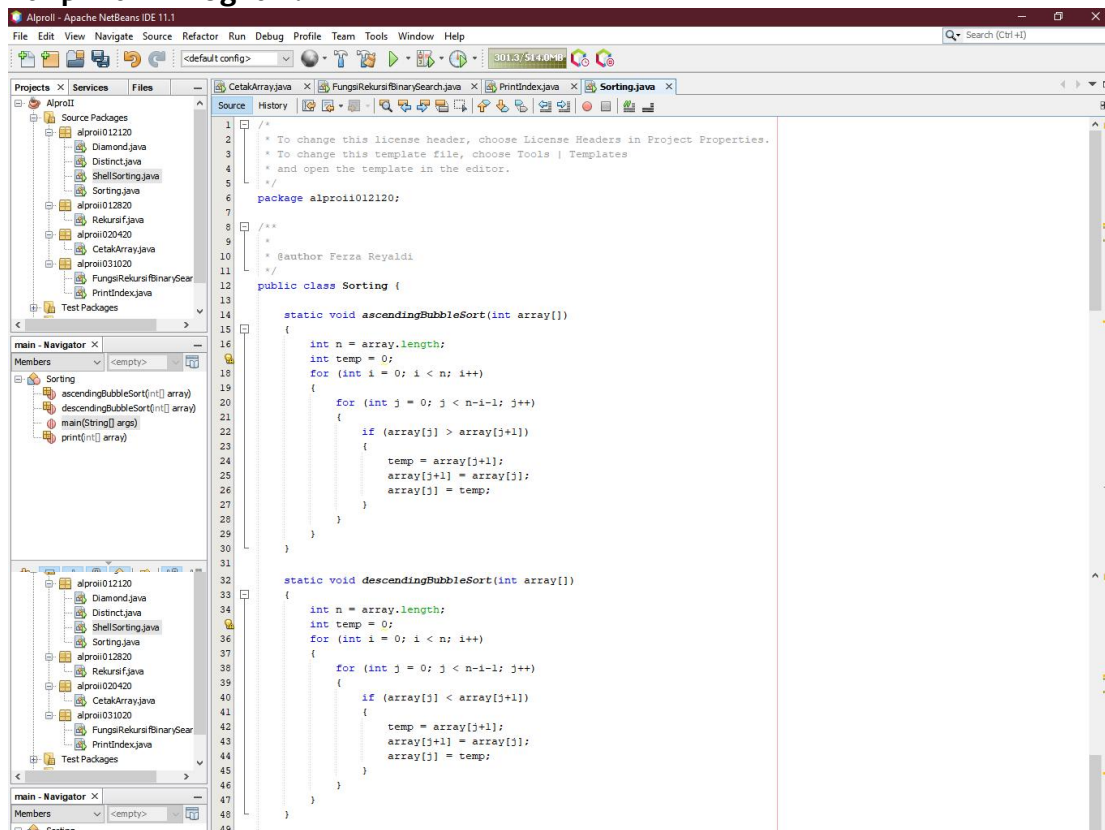
        array[j] = temp;
    }
}
}

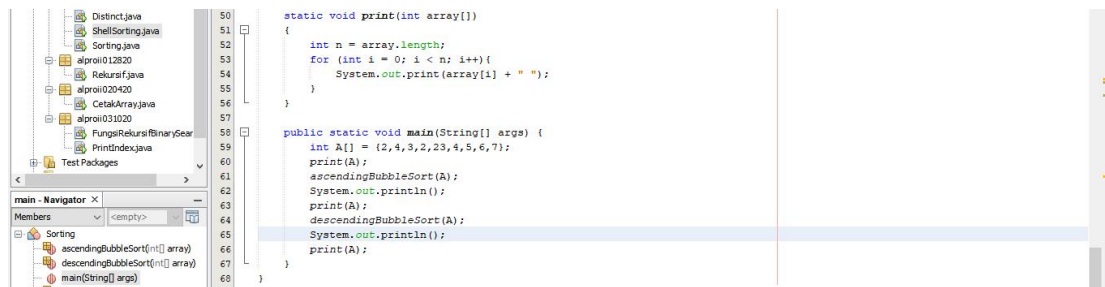
static void print(int array[])
{
    int n = array.length;
    for (int i = 0; i < n; i++){
        System.out.print(array[i] + " ");
    }
}

public static void main(String[] args) {
    int A[] = {2,4,3,2,23,4,5,6,7};
    print(A);
    ascendingBubbleSort(A);
    System.out.println();
    print(A);
    descendingBubbleSort(A);
    System.out.println();
    print(A);
}
}

```

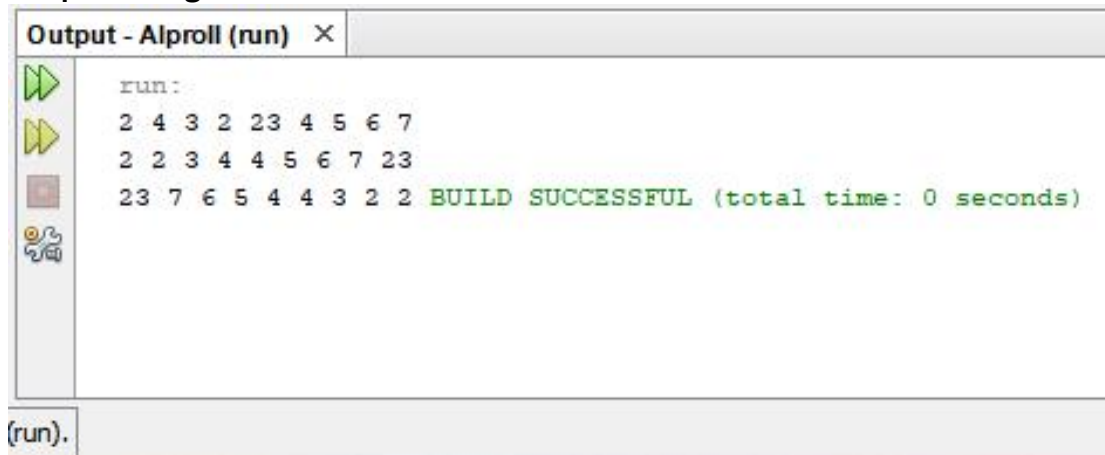
Lampiran Program:





```
50 static void print(int array[])
51 {
52     int n = array.length;
53     for (int i = 0; i < n; i++){
54         System.out.print(array[i] + " ");
55     }
56 }
57
58 public static void main(String[] args) {
59     int A[] = {2,4,3,2,23,4,5,6,7};
60     print(A);
61     ascendingBubbleSort(A);
62     System.out.println();
63     print(A);
64     descendingBubbleSort(A);
65     System.out.println();
66     print(A);
67 }
68 }
```

Output Program:



```
run:
2 4 3 2 23 4 5 6 7
2 2 3 4 4 5 6 7 23
23 7 6 5 4 4 3 2 2 BUILD SUCCESSFUL (total time: 0 seconds)
```