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Tugas Insertion Sort

Coding main.cpp =

```cpp
#include <iostream>

#include "header.h"

using namespace std;

void insertionSort(int arr[], int n);

int main()

{

    int arrI[]={7, 30, 3, 22};

    int sI = sizeof(arrI)/sizeof(arrI[0]);

    cout << "Step 1, sebelum array proses InsertionSort: \n";

    printArray(arrI, sI);

    insertionSort(arrI, sI);

    cout << "Step 2, sesudah array proses InsertionSort: \n";

    printArray(arrI, sI);

    return 0;

}
```

Coding header.h =

```cpp
#ifndef HEADER_H_INCLUDED

#define HEADER_H_INCLUDED

#include <iostream>

using namespace std;

void printArray(int arr[], int n)

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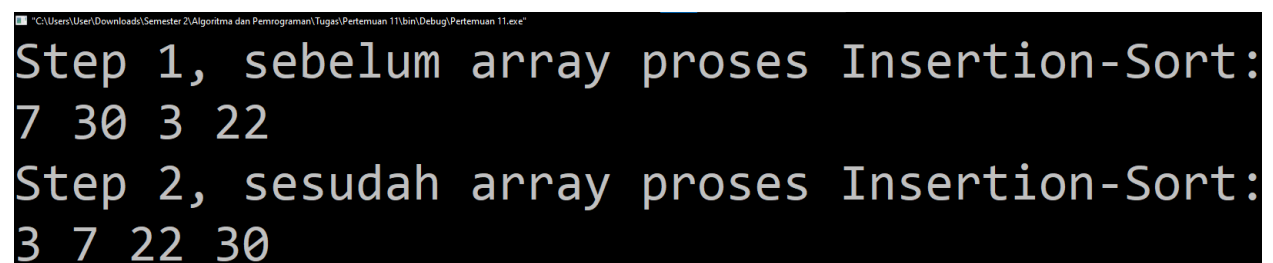
```cpp
    for(int i=0; i<n; i++)

    {

        cout << arr[i] << " ";

    }

    cout << endl;

}

void insertionSort(int arr[], int n)

{

    int i, j, key;

    for(i=1; i<n; i++)

    {

        key = arr[i];

        j = i-1;

        while(j>=0 && arr[j]>key)

        {

            arr[j+1] = arr[j];

            j=j-1;

        }

        arr[j+1] = key;

    }

}

#endif // HEADER_H_INCLUDED
```

Hasil coding:


```
"C:\Users\User\Downloads\Semester 2\Algoritma dan Pemrograman\Tugas\Pertemuan 11\bin\Debug\Pertemuan 11.exe"
Step 1, sebelum array proses Insertion-Sort:
7 30 3 22
Step 2, sesudah array proses Insertion-Sort:
3 7 22 30
```