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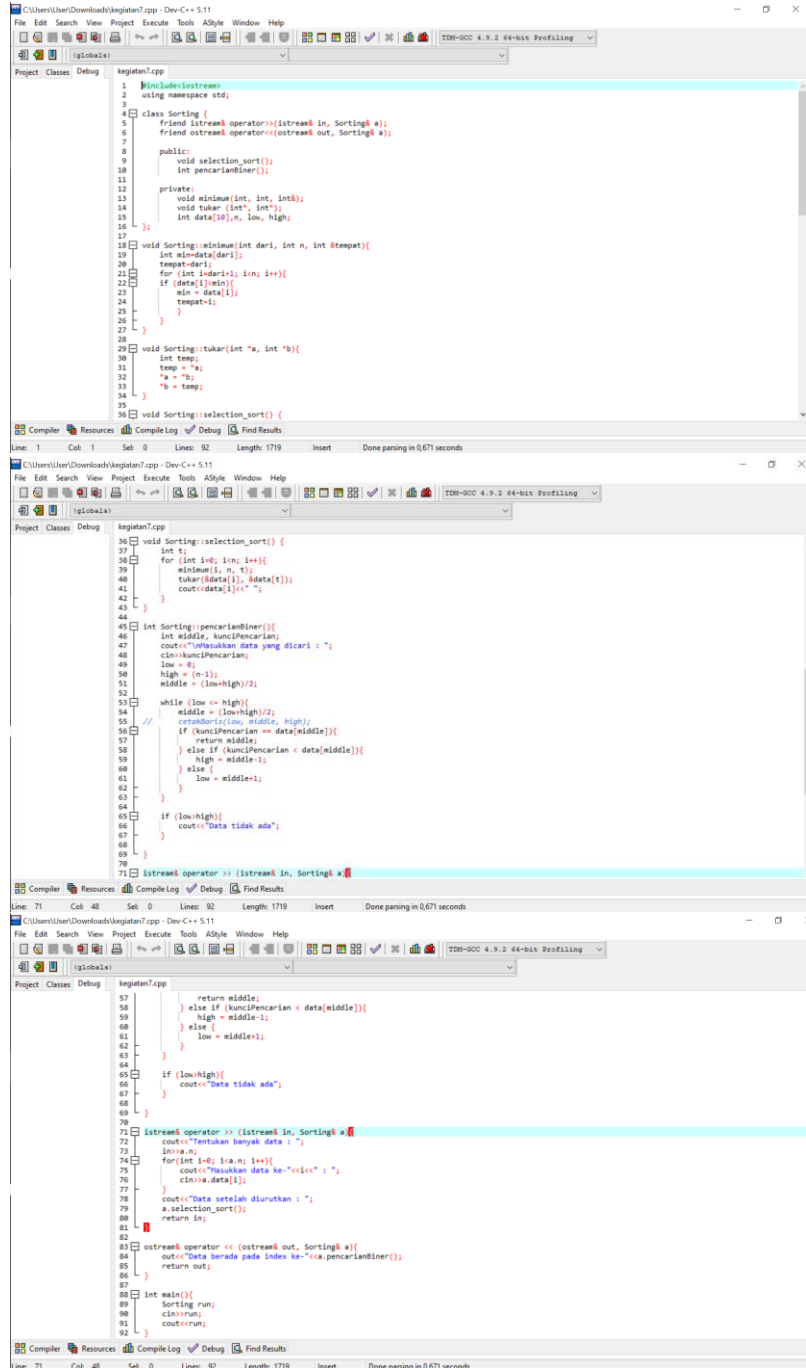
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KELAS : H

SLOT : RABU, 10.30

LATIHAN PRAKTIKUM 7

1. Program Class Sorting



```
1 #include<iostream>
2 using namespace std;
3
4 class Sorting {
5     friend ostream& operator<< (ostream& out, Sorting& a);
6     friend ostream& operator>> (istream& in, Sorting& a);
7
8 public:
9     void selection_sort();
10    int pencarianBiner();
11
12 private:
13    void minimum(int, int, int&);
14    void tukar(int*, int*);
15    int data[10], n, low, high;
16 };
17
18 void Sorting::minimum(int dari, int n, int &tempat){
19     int min=data[dari];
20     tempat=dari;
21     for (int i=dari+1; i<n; i++){
22         if (data[i]<min){
23             min = data[i];
24             tempat=i;
25         }
26     }
27 }
28
29 void Sorting::tukar(int *a, int *b){
30     int temp;
31     temp = *a;
32     *a = *b;
33     *b = temp;
34 }
35 void Sorting::selection_sort() {
36
37     int t;
38     for (int i=0; i<n; i++){
39         minimum(i, n, t);
40         tukar(&data[i], &data[t]);
41         cout<<data[i]<<" ";
42     }
43 }
44
45 int Sorting::pencarianBiner(){
46     int middle, kunciPencarian;
47     cout<<"Masukkan data yang dicari : ";
48     cin>>kunciPencarian;
49     low = 0;
50     high = (n-1);
51     middle = (low+high)/2;
52
53     while (low <= high){
54         middle = (low+high)/2;
55         if (data[middle] == kunciPencarian){
56             return middle;
57         } else if (kunciPencarian < data[middle]){
58             high = middle-1;
59         } else {
60             low = middle+1;
61         }
62     }
63
64     if (low>high){
65         cout<<"Data tidak ada";
66     }
67 }
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92 }
```

2. Output Program

```
C:\Users\User\Downloads>kegiatan7.exe
Tentukan banyak data : 3
Masukkan data ke-0 : 2
Masukkan data ke-1 : 4
Masukkan data ke-2 : 6
Data setelah diurutkan : 2 4 6
Masukkan data yang dicari : 2
Data berada pada index ke-0
-----
Process exited after 45.59 seconds with return value 0
Press any key to continue . . .
```