

LAPORAN UAS STRUKTUR DATA ADJACENCY LIST UNDIRECTED GRAPH



Disusun oleh :

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Edit dengan WPS Office

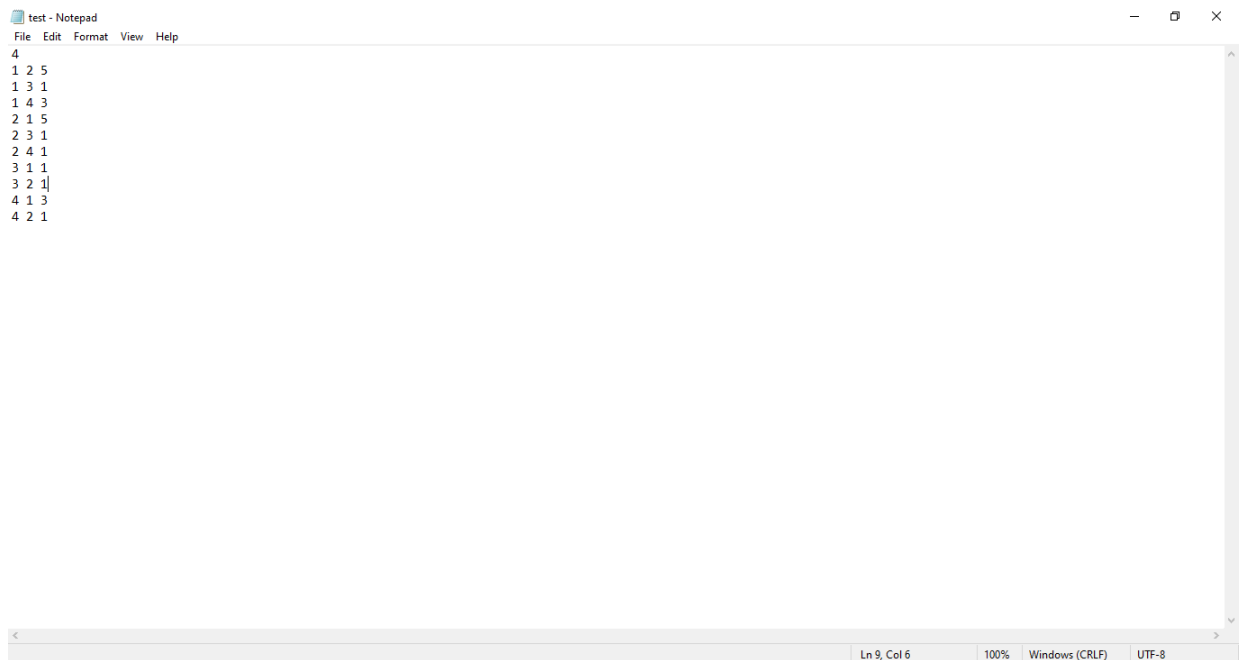
Input :

- 1) Int jumlah vertex yang ada dalam graph
- 2) (x,y,w) dengan x = vertex 1, y = vertex 2, w = weight

Output :

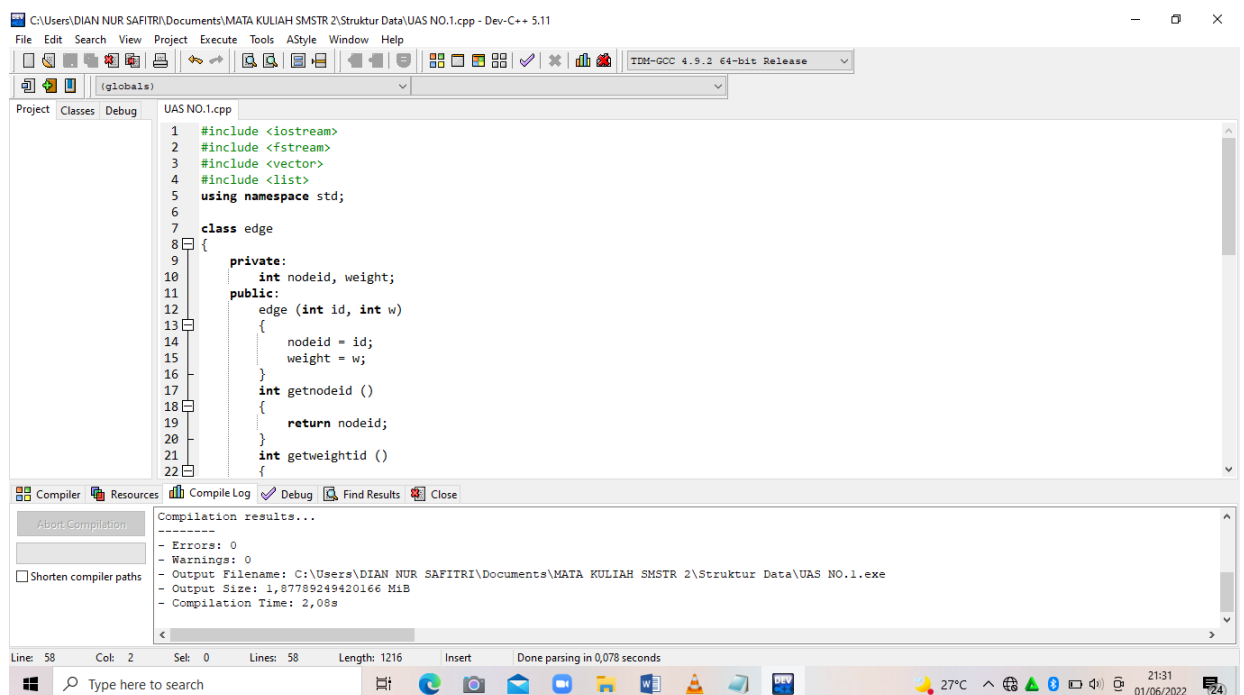
Satu per satu vertex, edge, dan weightnya

- Input



```
test - Notepad
File Edit Format View Help
4
1 2 5
1 3 1
1 4 3
2 1 5
2 3 1
2 4 1
3 1 1
3 2 1
4 1 3
4 2 1
```

- Kodingan (Source Code)



```
C:\Users\DIAN NUR SAFITRI\Documents\MATA KULIAH SMSTR 2\Struktur Data\UAS NO.1.cpp - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 4.9.2 64-bit Release
(global.s)
Project Classes Debug UAS NO.1.cpp
1 #include <iostream>
2 #include <fstream>
3 #include <vector>
4 #include <list>
5 using namespace std;
6
7 class edge
8 {
9 private:
10     int nodeid, weight;
11 public:
12     edge (int id, int w)
13     {
14         nodeid = id;
15         weight = w;
16     }
17     int getNodeid ()
18     {
19         return nodeid;
20     }
21     int getweightid ()
22     {
23         return weight;
24     }
25 }
```

Compilation results...

Errors: 0

Warnings: 0

Output Filename: C:\Users\DIAN NUR SAFITRI\Documents\MATA KULIAH SMSTR 2\Struktur Data\UAS NO.1.exe

Output Size: 1,87789249420166 MiB

Compilation Time: 2,08s



```
C:\Users\DIAN NUR SAFITRI\Documents\MATA KULIAH SMSTR 2\Struktur Data\UAS NO.1.cpp - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug
22 {
23     return weight;
24 }
25
26 };
27
28
29 int main ()
30 {
31     int totalnode, node1, node2, w;
32     ifstream input ("test.txt");
33     //ofstream output ("test.txt");
34     input >> totalnode;
35     vector < list <edge> > adjlist (totalnode);
36     while (input >> node1 >> node2 >> w)
37     {
38         adjlist [node1-1] .push_back (edge (node2, w));
39     }
40     int c = 1;
41     vector < list <edge> > :: iterator i;
42     for (i = adjlist.begin(); i != adjlist.end(); i++)
43     {
```

Compiler Resources Compile Log Debug Find Results Close

Compilation results...

Errors: 0
Warnings: 0
Output Filename: C:\Users\DIAN NUR SAFITRI\Documents\MATA KULIAH SMSTR 2\Struktur Data\UAS NO.1.exe
Output Size: 1,87789249420166 MiB
Compilation Time: 2,08s

```
Line: 58 Col: 2 Sel: 0 Lines: 58 Length: 1216 Insert Done parsing in 0,078 seconds
Type here to search
C:\Users\DIAN NUR SAFITRI\Documents\MATA KULIAH SMSTR 2\Struktur Data\UAS NO.1.cpp - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug
38 adjlist [node1-1] .push_back (edge (node2, w));
39
40 int c = 1;
41 vector < list <edge> > :: iterator i;
42 for (i = adjlist.begin(); i != adjlist.end(); i++)
43 {
44     cout << c << " -> ";
45     list <edge> li = *i;
46     list <edge> :: iterator iter;
47     for (iter = li.begin(); iter != li.end(); iter++)
48     {
49         cout << " [" << (*iter) .getnodeid() << ", " << (*iter) .getweightid() << "]" -> ";
50     }
51     cout << endl;
52     c++;
53 }
54
55
56
57 return 0;
58 }
```

Compiler Resources Compile Log Debug Find Results Close

Compilation results...

Errors: 0
Warnings: 0
Output Filename: C:\Users\DIAN NUR SAFITRI\Documents\MATA KULIAH SMSTR 2\Struktur Data\UAS NO.1.exe
Output Size: 1,87789249420166 MiB
Compilation Time: 2,08s

- Output (Hasil kodingan)

```
C:\Users\DIAN NUR SAFITRI\Downloads\adjgraph.exe
1 -> [2, 5] -> [3, 1] -> [4, 3] ->
2 -> [1, 5] -> [3, 1] -> [4, 1] ->
3 -> [1, 1] -> [2, 1] ->
4 -> [1, 3] -> [2, 1] ->

-----
Process exited after 10.63 seconds with return value 0
Press any key to continue . . .
```

