

PRAKTIKUM
ALGORITMA PEMROGRAMAN
KEGIATAN 1



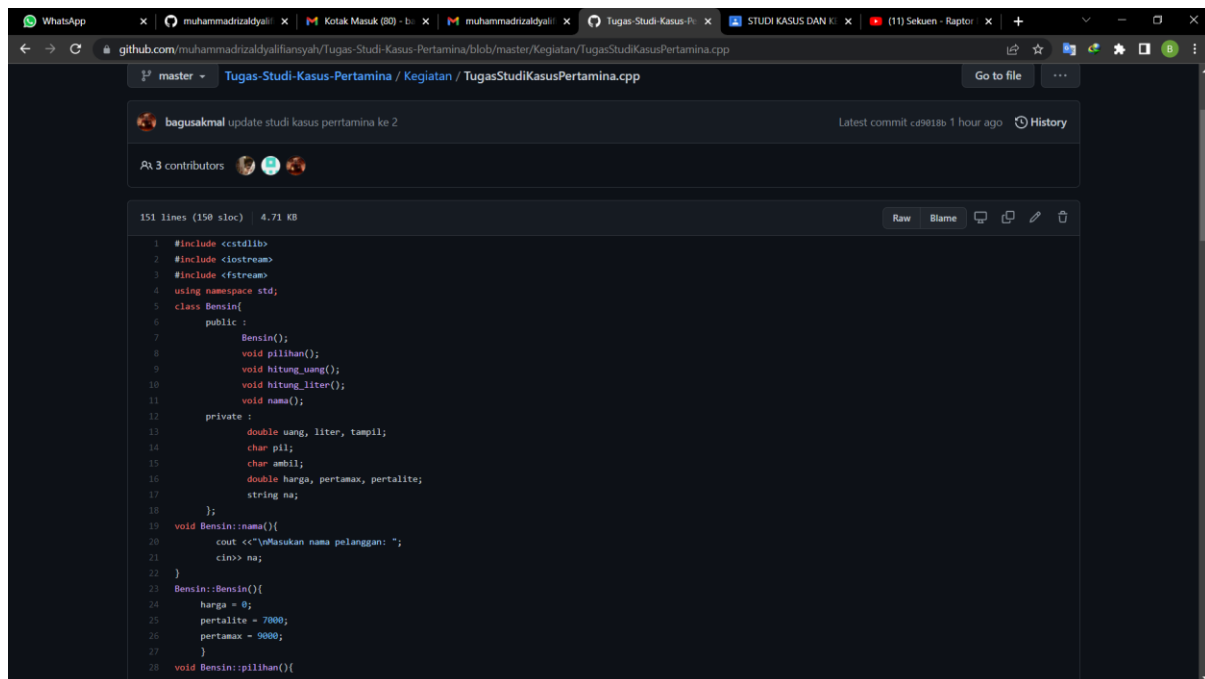
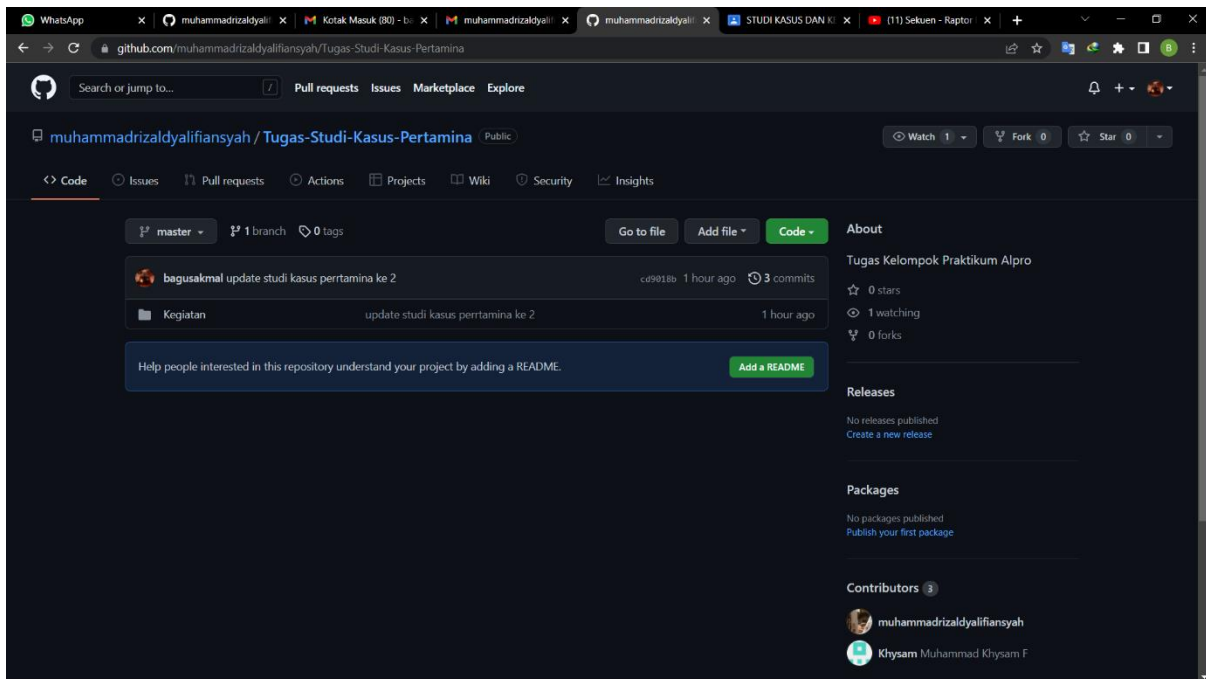
NAMA/NIM:

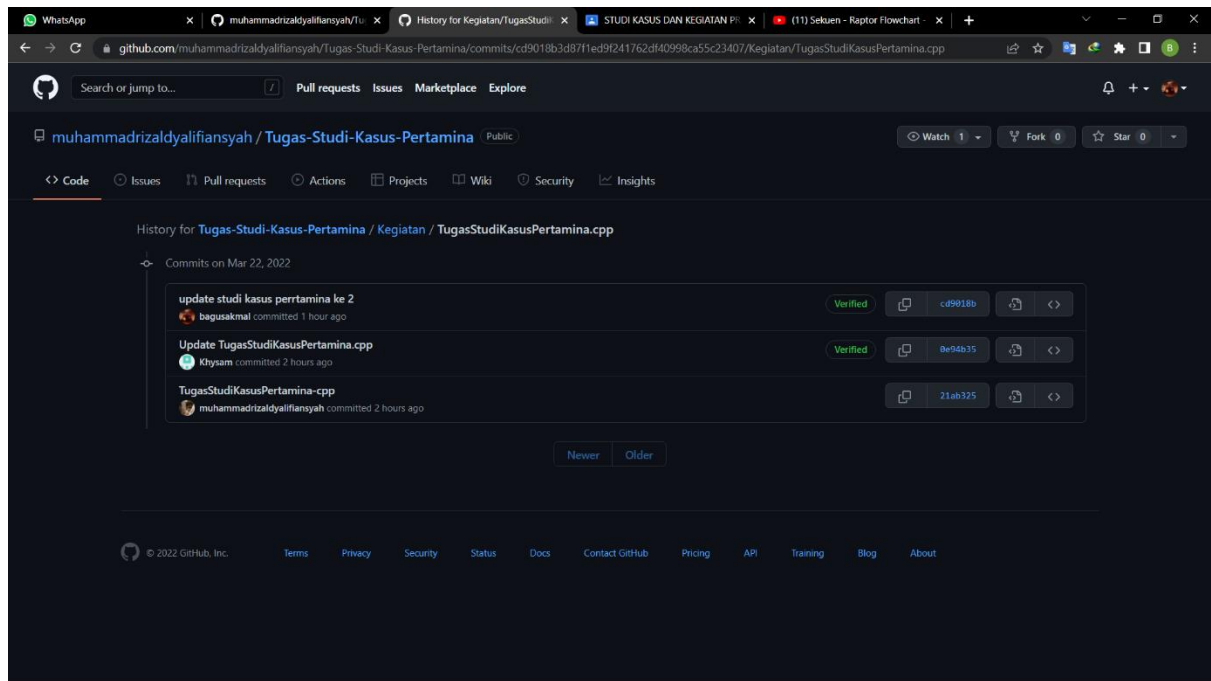
Bagus Akmal/2100018305

KELAS F

UNIVERSITAS AHMAD DAHLAN
FAKULTAS TEKNOLOGI INDUSTRI
PROGRAM STUDI INFORMATIKA
TAHUN 2021/2022

Screenshot repository studi kasus

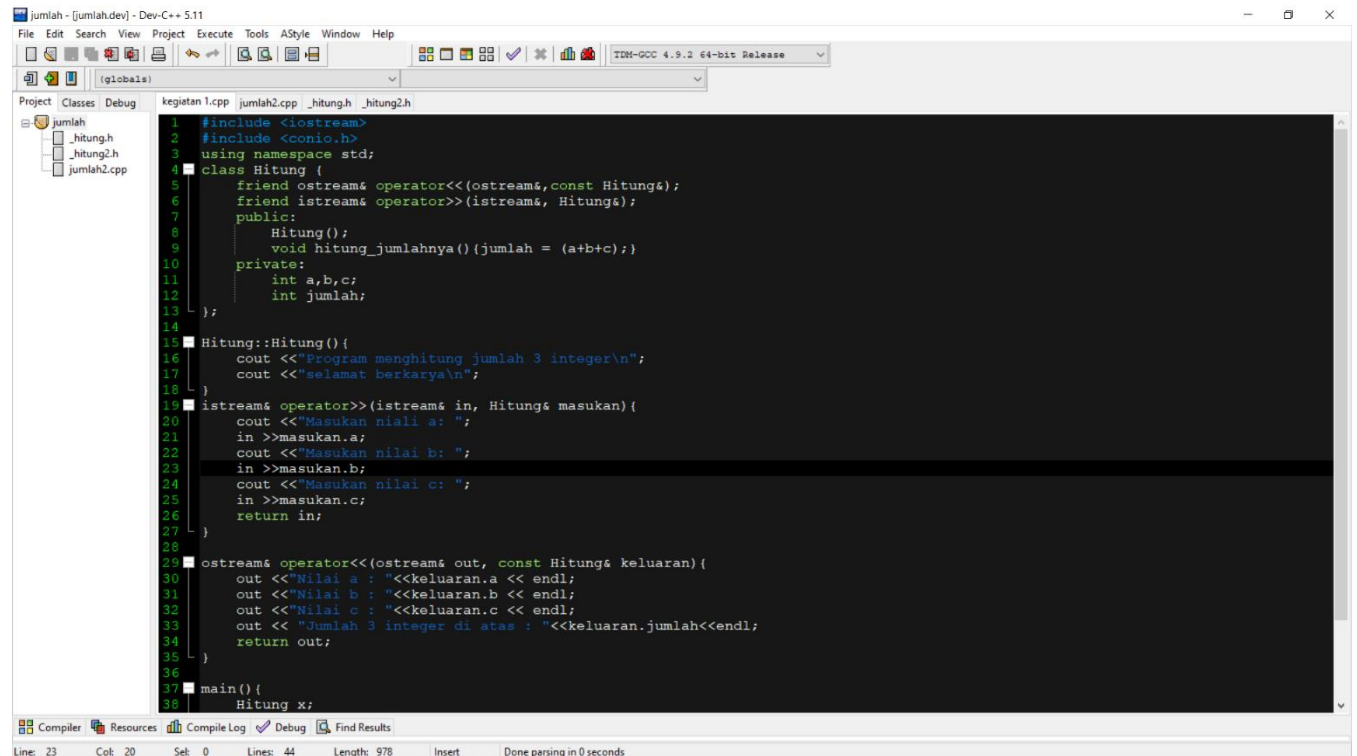




link repository: <https://github.com/muhammadrizaldyalifiansyah/Tugas-Studi-Kasus-Pertamina.git>

Screenshot kegiatan praktikum

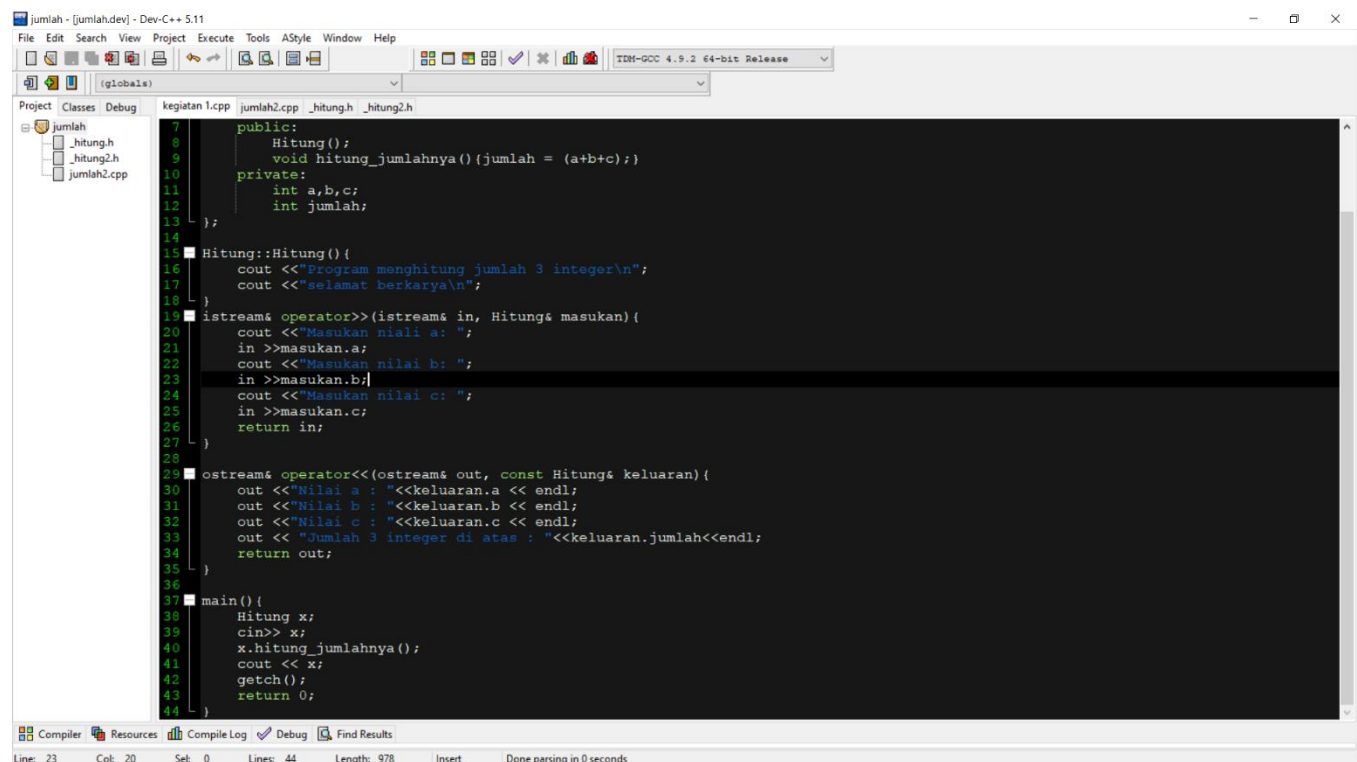
Kegiatan 1



The screenshot shows a C++ IDE with the following code in `kegiatan1.cpp`:

```
1 #include <iostream>
2 #include <conio.h>
3 using namespace std;
4 class Hitung {
5     friend ostream& operator<<(ostream&, const Hitung&);
6     friend istream& operator>>(istream&, Hitung&);
7 public:
8     Hitung();
9     void hitung_jumlahnya() {jumlah = (a+b+c);}
10 private:
11     int a,b,c;
12     int jumlah;
13 };
14
15 Hitung::Hitung() {
16     cout << "Program menghitung jumlah 3 integer\n";
17     cout << "selamat berkarya\n";
18 }
19 istream& operator>>(istream& in, Hitung& masukan) {
20     cout << "Masukan nilai a: ";
21     in >> masukan.a;
22     cout << "Masukan nilai b: ";
23     in >> masukan.b;
24     cout << "Masukan nilai c: ";
25     in >> masukan.c;
26     return in;
27 }
28
29 ostream& operator<<(ostream& out, const Hitung& keluaran) {
30     out << "Nilai a : "<< keluaran.a << endl;
31     out << "Nilai b : "<< keluaran.b << endl;
32     out << "Nilai c : "<< keluaran.c << endl;
33     out << "Jumlah 3 integer di atas : "<< keluaran.jumlah << endl;
34     return out;
35 }
36
37 main() {
38     Hitung x;
```

The IDE interface includes a Project Explorer on the left showing the file structure: `jumlah` (folder), `_hitung.h`, `_hitung2.h`, and `jumlah2.cpp`. The status bar at the bottom indicates the current line is 23, column is 20, and the file has 44 lines and 978 characters.

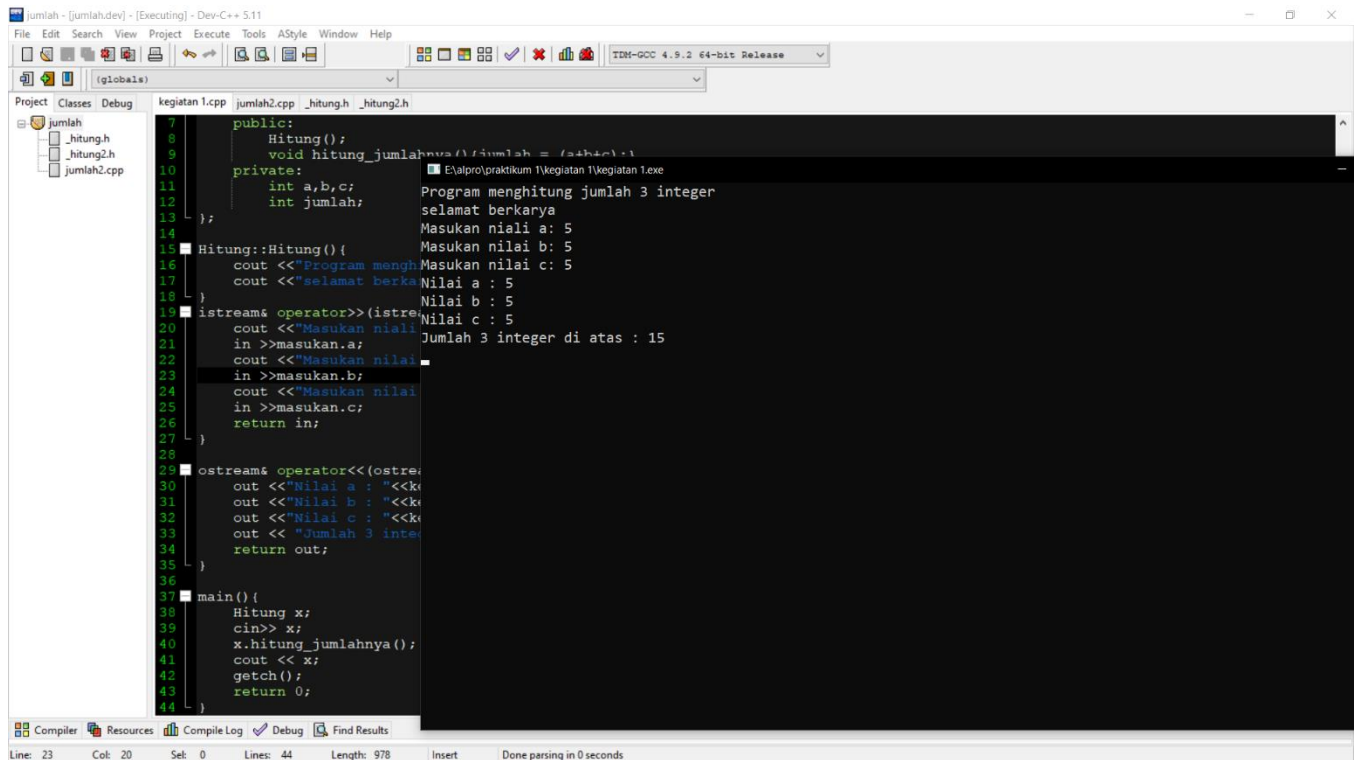


The screenshot shows the same C++ IDE with the completed code in `kegiatan1.cpp`:

```
7 public:
8     Hitung();
9     void hitung_jumlahnya() {jumlah = (a+b+c);}
10 private:
11     int a,b,c;
12     int jumlah;
13 };
14
15 Hitung::Hitung() {
16     cout << "Program menghitung jumlah 3 integer\n";
17     cout << "selamat berkarya\n";
18 }
19 istream& operator>>(istream& in, Hitung& masukan) {
20     cout << "Masukan nilai a: ";
21     in >> masukan.a;
22     cout << "Masukan nilai b: ";
23     in >> masukan.b;
24     cout << "Masukan nilai c: ";
25     in >> masukan.c;
26     return in;
27 }
28
29 ostream& operator<<(ostream& out, const Hitung& keluaran) {
30     out << "Nilai a : "<< keluaran.a << endl;
31     out << "Nilai b : "<< keluaran.b << endl;
32     out << "Nilai c : "<< keluaran.c << endl;
33     out << "Jumlah 3 integer di atas : "<< keluaran.jumlah << endl;
34     return out;
35 }
36
37 main() {
38     Hitung x;
39     cin >> x;
40     x.hitung_jumlahnya();
41     cout << x;
42     getch();
43     return 0;
44 }
```

The IDE interface remains the same, with the status bar showing the current line is 23, column is 20, and the file has 44 lines and 978 characters.

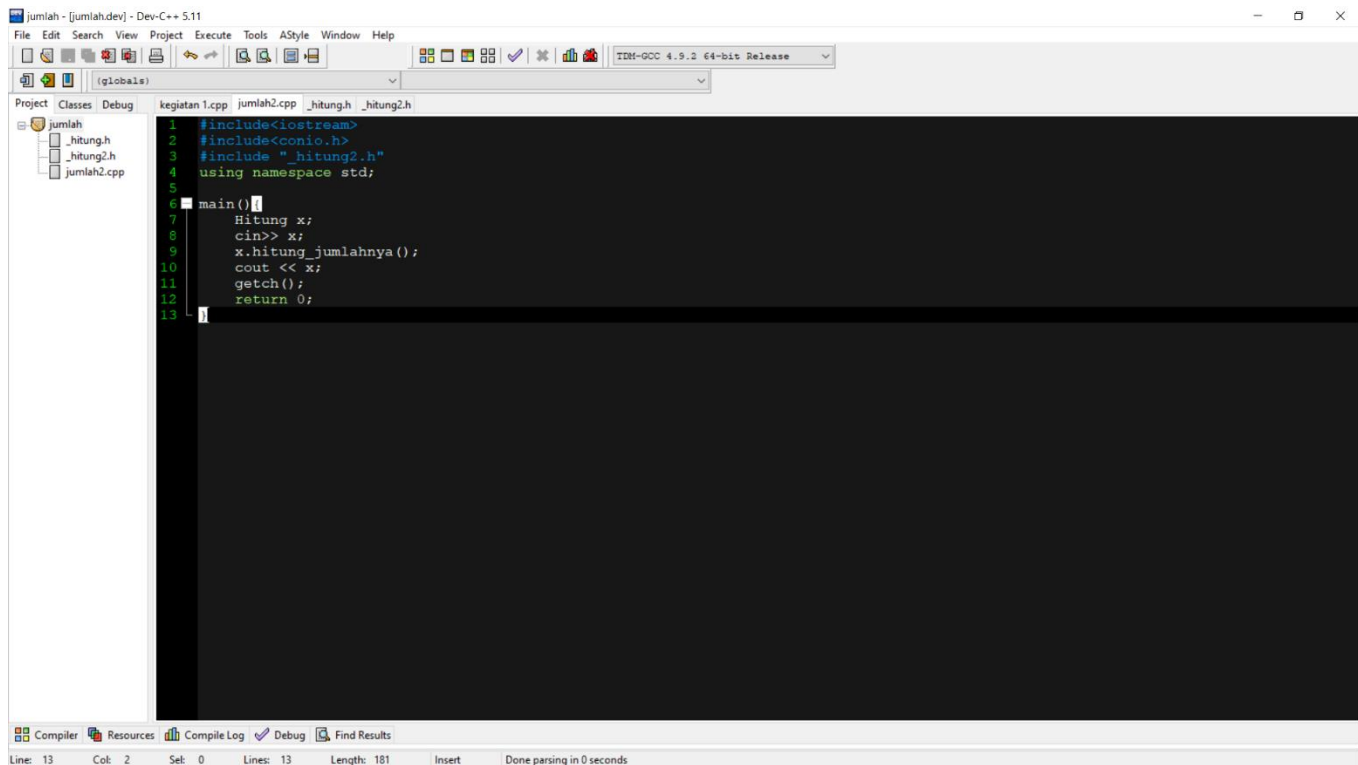
Output:



```
7 public:
8     Hitung();
9     void hitung_jumlahnya() { jumlah = (a+b+c) * 1;
10 private:
11     int a,b,c;
12     int jumlah;
13 };
14
15 Hitung::Hitung() {
16     cout << "Program menghitung jumlah 3 integer
17     cout << "selamat berkarya
18     cout << "Masukan nilai a: 5
19     cout << "Masukan nilai b: 5
20     cout << "Masukan nilai c: 5
21     cout << "Masukan nilai a: 5
22     cout << "Masukan nilai b: 5
23     cout << "Masukan nilai c: 5
24     cout << "Jumlah 3 integer di atas : 15
25     return in;
26 }
27
28 ostream& operator<<(ostream& out, const Hitung& x) {
29     out << "Nilai a : " << x.a << endl;
30     out << "Nilai b : " << x.b << endl;
31     out << "Nilai c : " << x.c << endl;
32     out << "Jumlah 3 integer : " << x.jumlah << endl;
33     return out;
34 }
35
36 main() {
37     Hitung x;
38     cin >> x;
39     x.hitung_jumlahnya();
40     cout << x;
41     getch();
42     return 0;
43 }
```

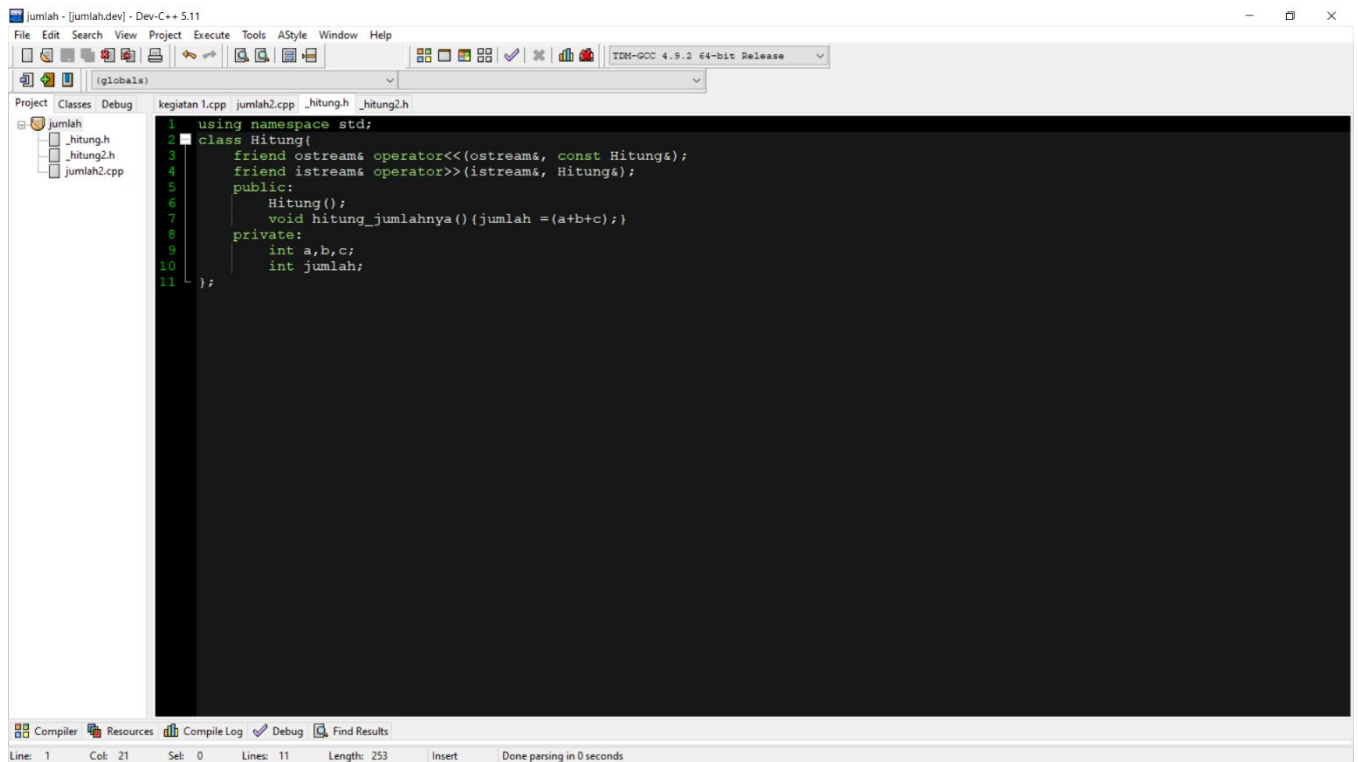
Kegiatan 2

Jumlah2.cpp



```
1 #include <iostream>
2 #include <conio.h>
3 #include "hitung2.h"
4 using namespace std;
5
6 main() {
7     Hitung x;
8     cin >> x;
9     x.hitung_jumlahnya();
10    cout << x;
11    getch();
12    return 0;
13 }
```

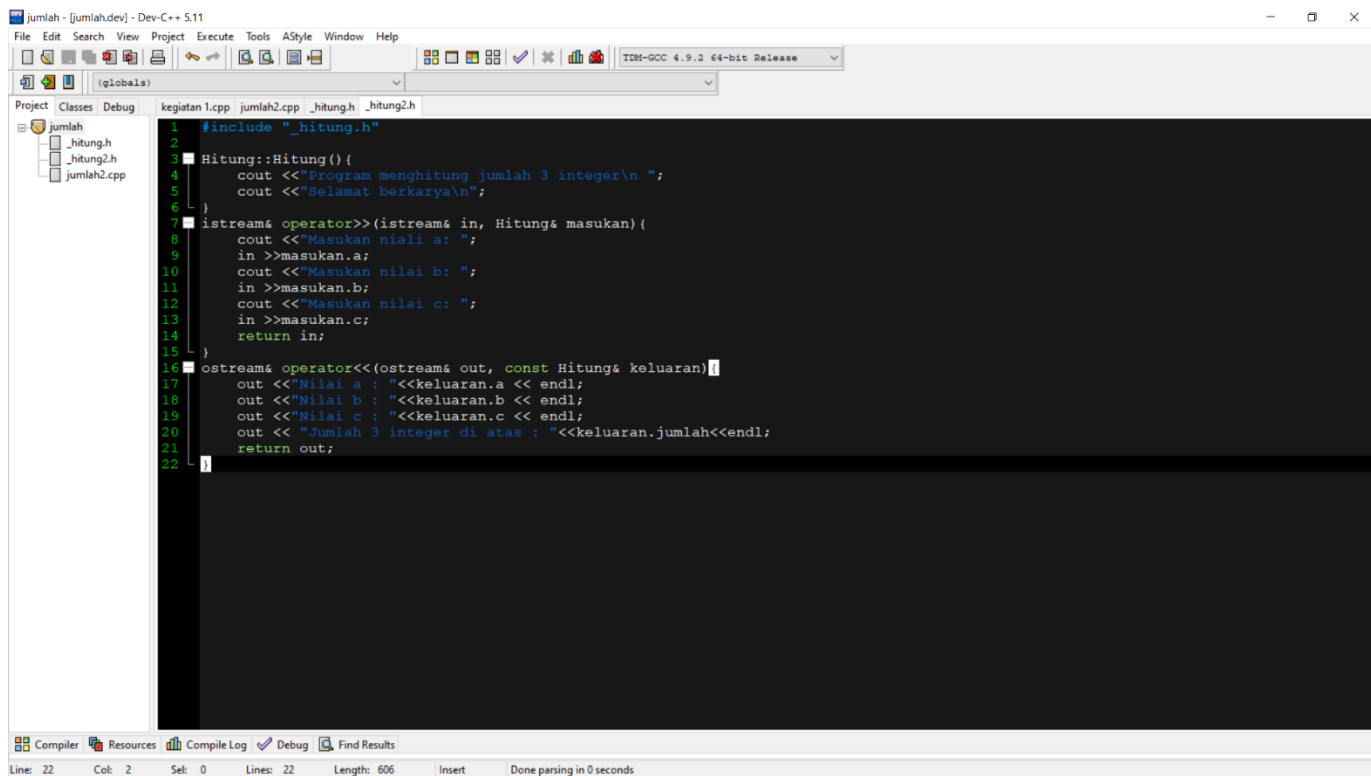
_hitung.h



The screenshot shows the Dev-C++ IDE with the file `_hitung.h` open. The code defines a `Hitung` class with a public constructor `Hitung()` and a public method `hitung_jumlahnya()` that calculates the sum of three integers `a`, `b`, and `c`. The class also has private variables `a`, `b`, `c`, and `jumlah`. The IDE interface includes a menu bar, a toolbar, a project explorer on the left, and a status bar at the bottom.

```
1 using namespace std;
2 class Hitung{
3     friend ostream& operator<<(ostream&, const Hitung&);
4     friend istream& operator>>(istream&, Hitung&);
5 public:
6     Hitung();
7     void hitung_jumlahnya() {jumlah = (a+b+c);}
8 private:
9     int a,b,c;
10    int jumlah;
11};
```

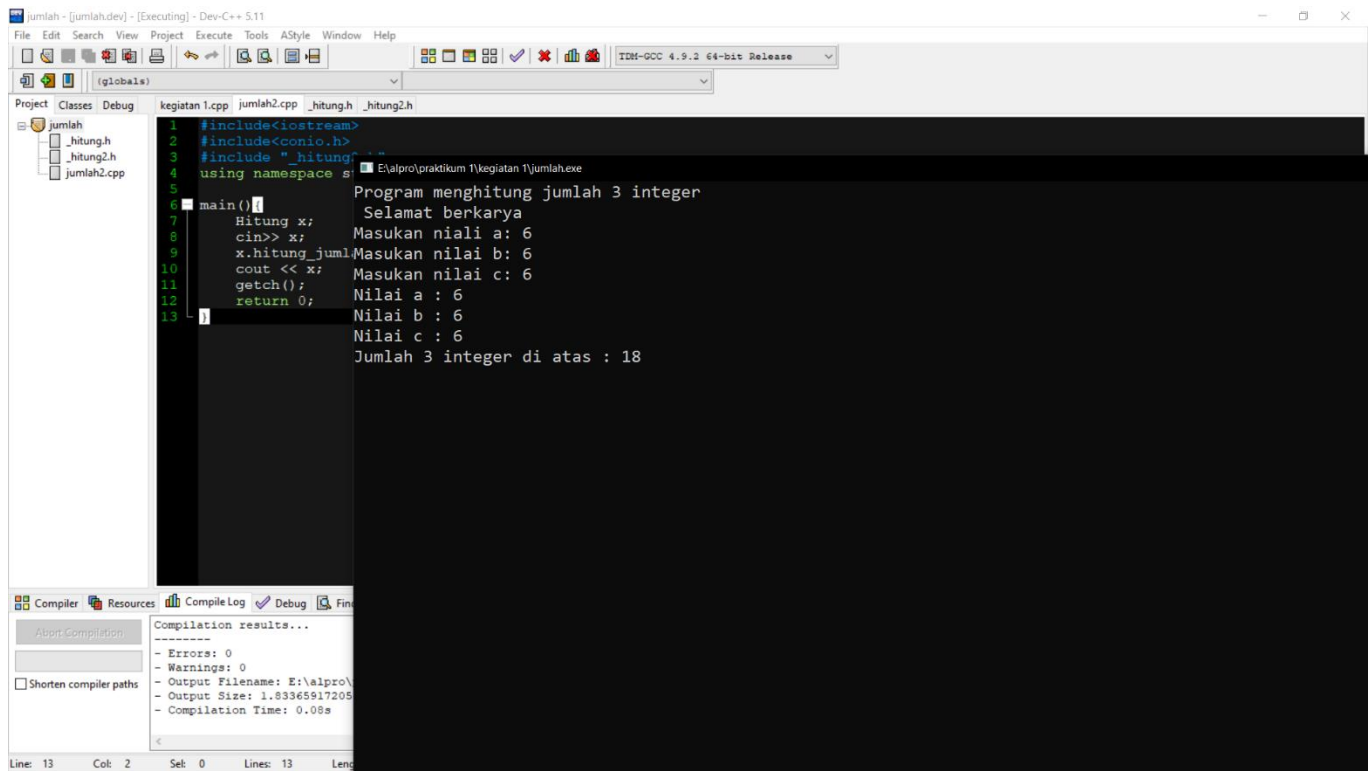
_hitung2.h



The screenshot shows the Dev-C++ IDE with the file `_hitung2.h` open. The code defines a `Hitung` class with a public constructor `Hitung()` and a public method `hitung_jumlahnya()` that calculates the sum of three integers `a`, `b`, and `c`. The class also has private variables `a`, `b`, `c`, and `jumlah`. The IDE interface includes a menu bar, a toolbar, a project explorer on the left, and a status bar at the bottom.

```
1 #include "_hitung.h"
2
3 Hitung::Hitung(){
4     cout <<"Program menghitung jumlah 3 integer\n ";
5     cout <<"Selamat berkarya\n";
6 }
7 istream& operator>>(istream& in, Hitung& masukan){
8     cout <<"Masukan nilai a: ";
9     in >>masukan.a;
10    cout <<"Masukan nilai b: ";
11    in >>masukan.b;
12    cout <<"Masukan nilai c: ";
13    in >>masukan.c;
14    return in;
15 }
16 ostream& operator<<(ostream& out, const Hitung& keluaran){
17     out <<"Nilai a : "<<keluaran.a << endl;
18     out <<"Nilai b : "<<keluaran.b << endl;
19     out <<"Nilai c : "<<keluaran.c << endl;
20     out << "Jumlah 3 integer di atas : "<<keluaran.jumlah<<endl;
21     return out;
22 }
```

Output



```
1 #include<iostream>
2 #include<conio.h>
3 #include "hitung.h"
4 using namespace std;
5
6 main()
7 {
8     Hitung x;
9     cin >> x;
10    x.hitung_juml;
11    cout << x;
12    getch();
13    return 0;
14 }
```

Program menghitung jumlah 3 integer
Selamat berkarya
Masukan niali a: 6
Masukan nilai b: 6
Masukan nilai c: 6
Nilai a : 6
Nilai b : 6
Nilai c : 6
Jumlah 3 integer di atas : 18

Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: E:\alpro\praktikum 1\jumlah.exe
- Output Size: 1.83365917205
- Compilation Time: 0.08s