

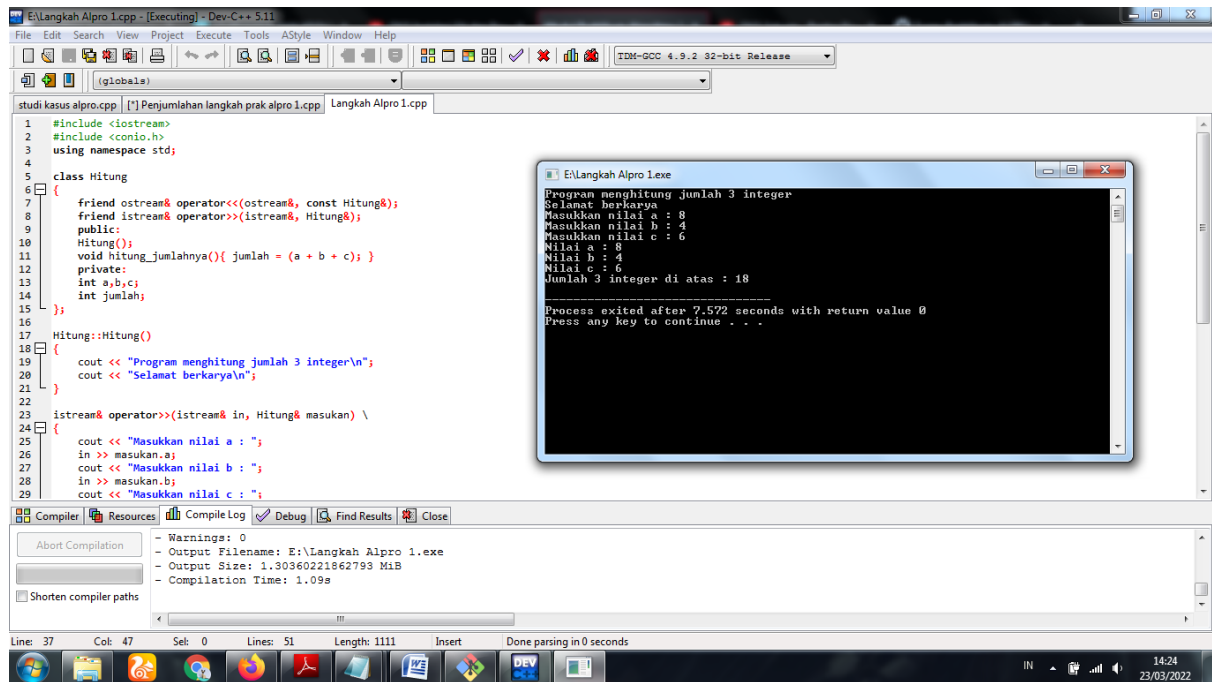
Nama : Ardian Muhammad Fahrizal

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Kelas : H

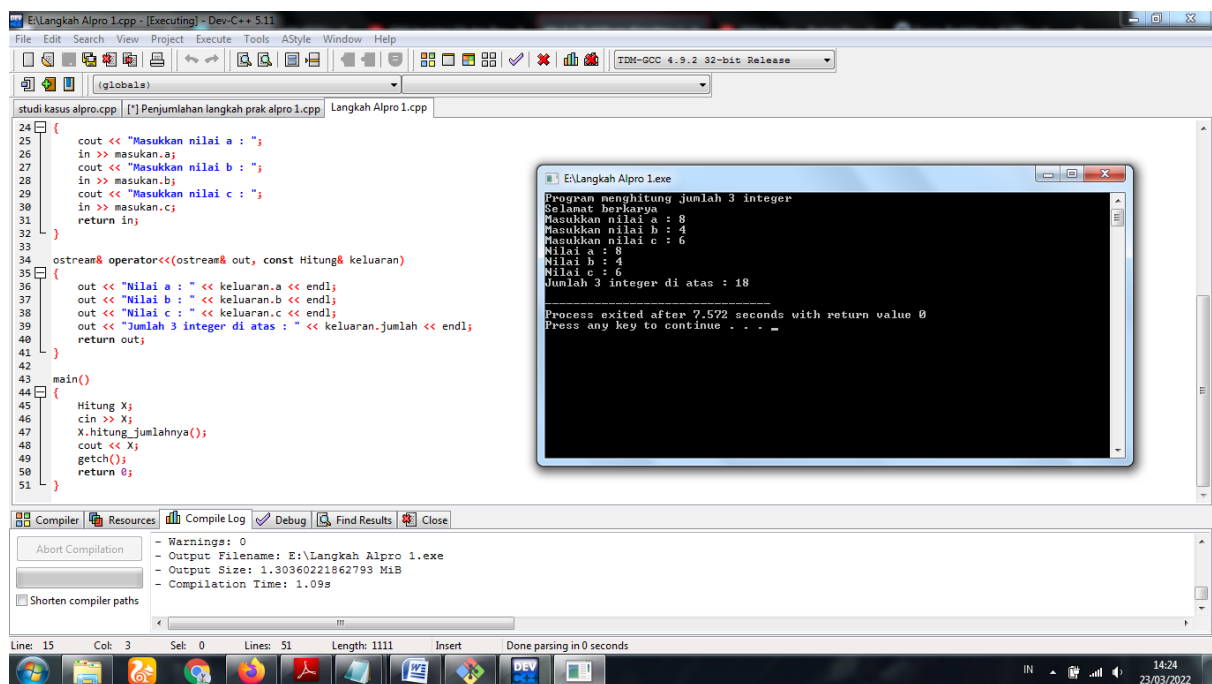
## Kegiatan 1

### 1. Program menghitung jumlah 3 integer



```
1 #include <iostream>
2 #include <conio.h>
3 using namespace std;
4
5 class Hitung
6 {
7     friend ostream& operator<<(ostream&, const Hitung&);
8     friend istream& operator>>(istream&, Hitung&);
9     public:
10        Hitung();
11        void hitung_jumlahnya(){ jumlah = (a + b + c); }
12     private:
13        int a,b,c;
14        int jumlah;
15 };
16
17 Hitung::Hitung()
18 {
19     cout << "Program menghitung jumlah 3 integer\n";
20     cout << "Selamat berkarya\n";
21 }
22
23 istream& operator>>(istream& in, Hitung& masukan) \
24 {
25     cout << "Masukkan nilai a : ";
26     in >> masukan.a;
27     cout << "Masukkan nilai b : ";
28     in >> masukan.b;
29     cout << "Masukkan nilai c : ";
30     in >> masukan.c;
31     return in;
32 }
33
34 ostream& operator<<(ostream& out, const Hitung& keluaran)
35 {
36     out << "Nilai a : " << keluaran.a << endl;
37     out << "Nilai b : " << keluaran.b << endl;
38     out << "Nilai c : " << keluaran.c << endl;
39     out << "Jumlah 3 integer di atas : " << keluaran.jumlah << endl;
40     return out;
41 }
42
43 main()
44 {
45     Hitung X;
46     cin >> X;
47     X.hitung_jumlahnya();
48     cout << X;
49     getch();
50     return 0;
51 }
```

Program menghitung jumlah 3 integer  
Selamat berkarya  
Masukkan nilai a : 8  
Masukkan nilai b : 4  
Masukkan nilai c : 6  
Nilai a : 8  
Nilai b : 4  
Nilai c : 6  
Jumlah 3 integer di atas : 18  
Process exited after 7.572 seconds with return value 0  
Press any key to continue . . .



```
24 {
25     cout << "Masukkan nilai a : ";
26     in >> masukan.a;
27     cout << "Masukkan nilai b : ";
28     in >> masukan.b;
29     cout << "Masukkan nilai c : ";
30     in >> masukan.c;
31     return in;
32 }
33
34 ostream& operator<<(ostream& out, const Hitung& keluaran)
35 {
36     out << "Nilai a : " << keluaran.a << endl;
37     out << "Nilai b : " << keluaran.b << endl;
38     out << "Nilai c : " << keluaran.c << endl;
39     out << "Jumlah 3 integer di atas : " << keluaran.jumlah << endl;
40     return out;
41 }
42
43 main()
44 {
45     Hitung X;
46     cin >> X;
47     X.hitung_jumlahnya();
48     cout << X;
49     getch();
50     return 0;
51 }
```

Program menghitung jumlah 3 integer  
Selamat berkarya  
Masukkan nilai a : 8  
Masukkan nilai b : 4  
Masukkan nilai c : 6  
Nilai a : 8  
Nilai b : 4  
Nilai c : 6  
Jumlah 3 integer di atas : 18  
Process exited after 7.572 seconds with return value 0  
Press any key to continue . . .

Pada gambar program diatas digunakan menghitung jumlah 3 integer

## 2. Studi Kasus pembelian makanan

Kelompok :

1. Faisal Habibie (2100018402)

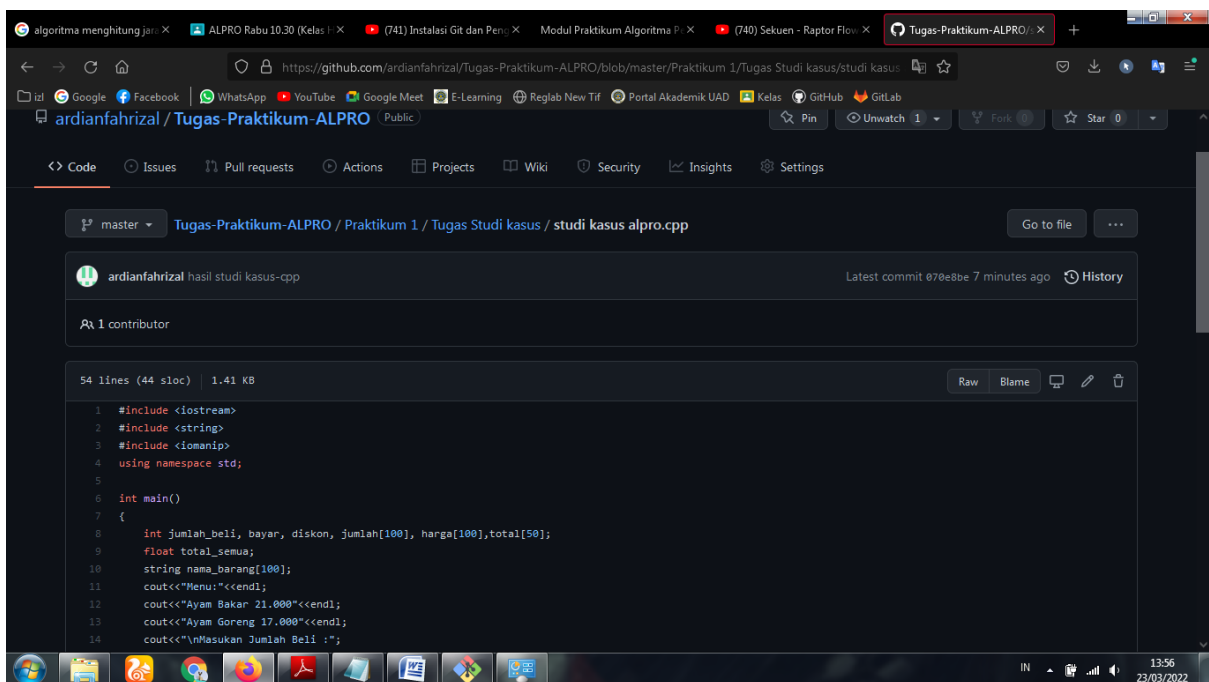
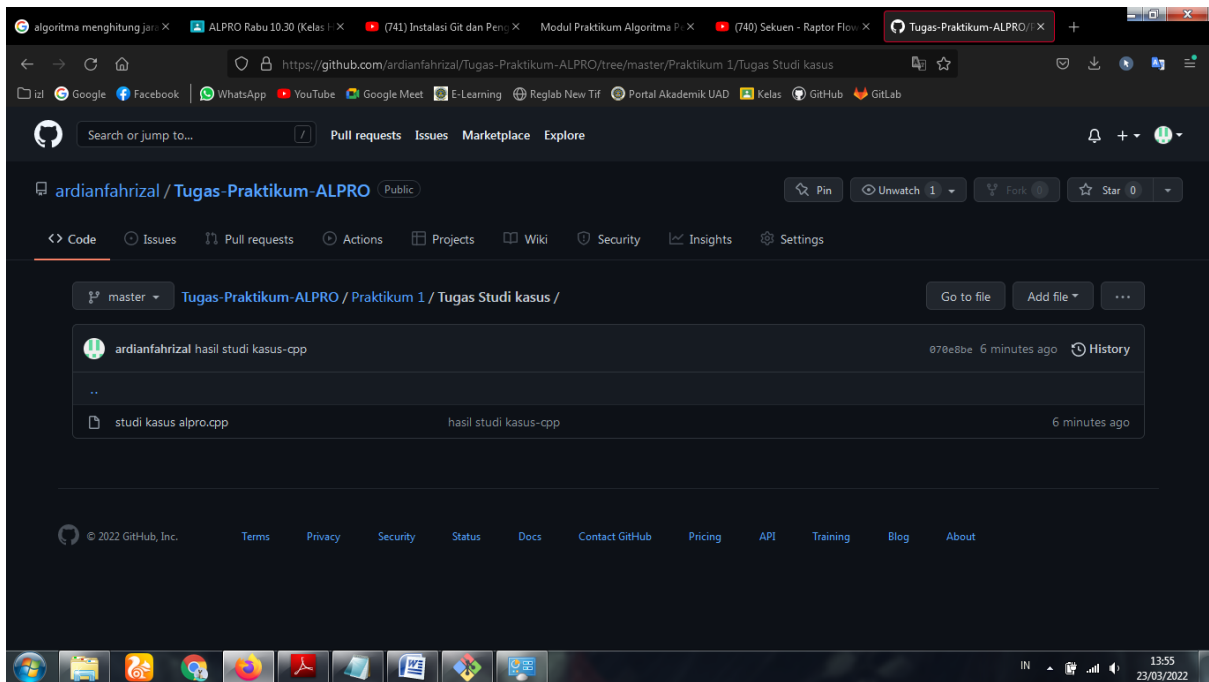
2. Ardian Muhammad Fahrizal (2100018410)

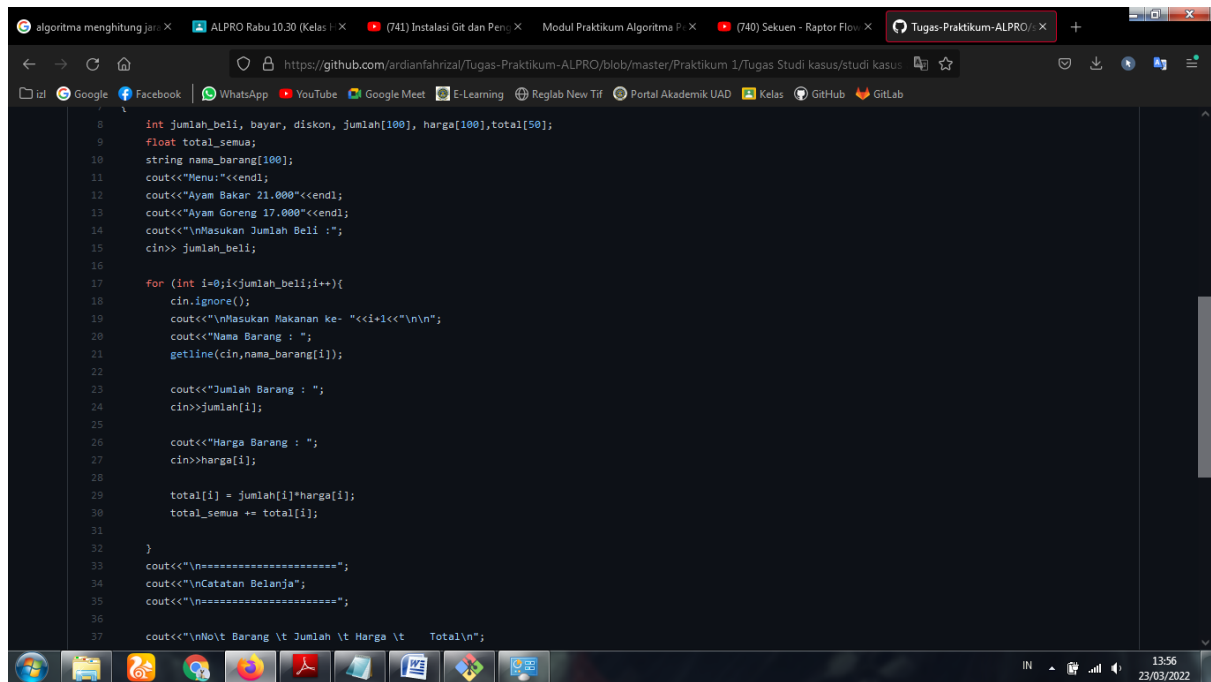
The screenshot shows a C++ program in Dev-C++ titled "studi kasus alpro.cpp". The code includes headers for `<iostream>`, `<string>`, and `<iomanip>`, and uses the `std` namespace. The `main` function declares arrays for item names, quantities, prices, and totals. It prints a menu with two items: "Ayam Bakar 21.000" and "Ayan Goreng 17.000". It then enters a loop to process purchases, asking for the quantity of each item. The code is currently at line 15, where it prompts for the quantity of the first item.

```
1 #include <iostream>
2 #include <string>
3 #include <iomanip>
4 using namespace std;
5
6 int main()
7 {
8     int jumlah_beli, bayar, diskon, jumlah[100], harga[100], total[50];
9     float total_semua;
10    string nama_barang[100];
11    cout<<"Menu:"<<endl;
12    cout<<"Ayam Bakar 21.000"<<endl;
13    cout<<"Ayan Goreng 17.000"<<endl;
14    cout<<"\nMasukan Jumlah Beli :";
15    cin>> jumlah_beli;
16
17    for (int i=0; i<jumlah_beli; i++){
18        cin.ignore();
19        cout<<"\nMasukan Makanan ke- "<<i+1<<"\n\n";
20        cout<<"Nama Barang : ";
21        getline(cin, nama_barang[i]);
22
23        cout<<"Jumlah Barang : ";
24        cin>>jumlah[i];
25
26        cout<<"Harga Barang : ";
27        cin>>harga[i];
28
29        total[i] = jumlah[i]*harga[i];
```

This screenshot shows the continuation of the C++ program. It calculates the total price for each item and sums them up. It then checks if the total exceeds 45,000 to apply a 10% discount. Finally, it calculates the amount to be paid after the discount and prints the receipt details.

```
27        cin>>harga[i];
28        total[i] = jumlah[i]*harga[i];
29        total_semua += total[i];
30
31    }
32    cout<<"\n=====";
33    cout<<"\nCatatan Belanja";
34    cout<<"\n=====";
35
36    cout<<"\nNo\tBarang\tJumlah\tHarga\tTotal\n";
37    for (int i=0; i<jumlah_beli; i++){
38        cout<<i+1<<setw(8)<<"<<"<nama_barang[i]<<setw(10)<<"<<jumlah[i]<<setw(12)<<"<<total[i]<<endl;
39    }
40
41    if (total_semua>=45000){
42        diskon=total_semua*10/100;
43    }
44
45    cout<<"\nJumlah Bayar : Rp."<<total_semua<<endl;
46    cout<<"Diskon : Rp."<<diskon<<endl;
47    cout<<"Total Bayar : Rp."<<total_semua - diskon<<endl;
48    cout<<"Bayar : Rp.";
49    cin>>bayar;
50    cout<<"Kembalian : Rp."<<(bayar-(total_semua-diskon))<<endl;
51    return 0;
52 }
```





```
8   int jumlah_beli, bayar, diskon, jumlah[100], harga[100], total[50];
9   float total_semua;
10  string nama_barang[100];
11  cout<<"Menu:"<<endl;
12  cout<<"Ayam Bakar 21.000"<<endl;
13  cout<<"Ayam Goreng 17.000"<<endl;
14  cout<<"\nMasukan Jumlah Beli :";
15  cin>> jumlah_beli;
16
17  for (int i=0; i<jumlah_beli; i++){
18      cin.ignore();
19      cout<<"\nMasukan Makanan ke- "<<i+1<<"\n\n";
20      cout<<"Nama Barang : ";
21      getline(cin, nama_barang[i]);
22
23      cout<<"Jumlah Barang : ";
24      cin>>jumlah[i];
25
26      cout<<"Harga Barang : ";
27      cin>>harga[i];
28
29      total[i] = jumlah[i]*harga[i];
30      total_semua += total[i];
31  }
32
33  cout<<"\n=====";
34  cout<<"\nCetakan Belanja";
35  cout<<"\n=====";
36
37  cout<<"\nNo\t Barang \t Jumlah \t Harga \t Total\n";
```

Link Repo :

<https://github.com/ardianfahrizal/Tugas-Praktikum-ALPRO.git>

<https://github.com/ardianfahrizal/Tugas-Praktikum-ALPRO/tree/master/Praktikum%201/Tugas%20Studi%20kasus>