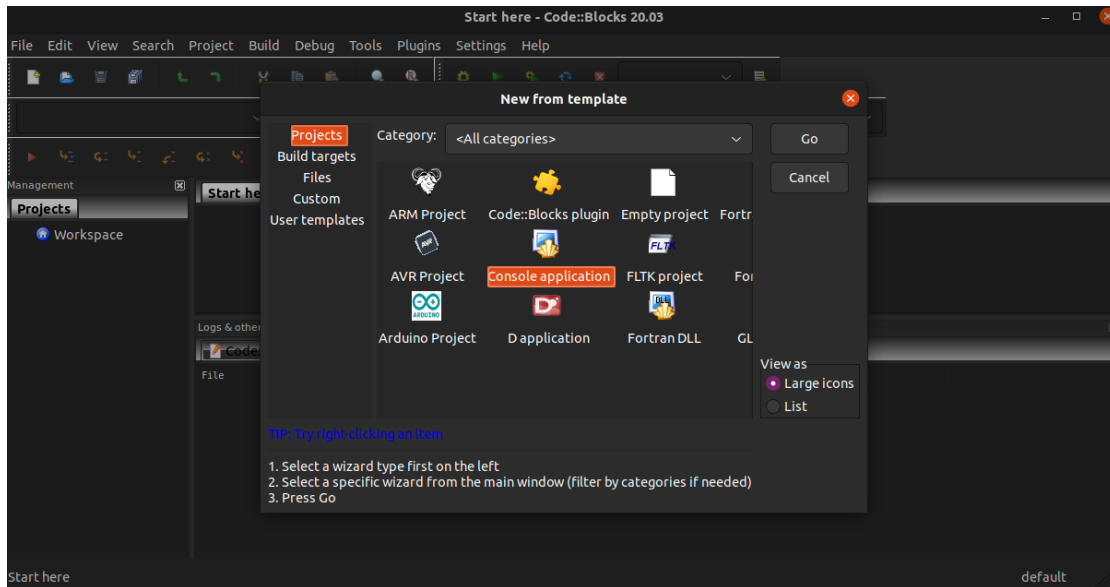
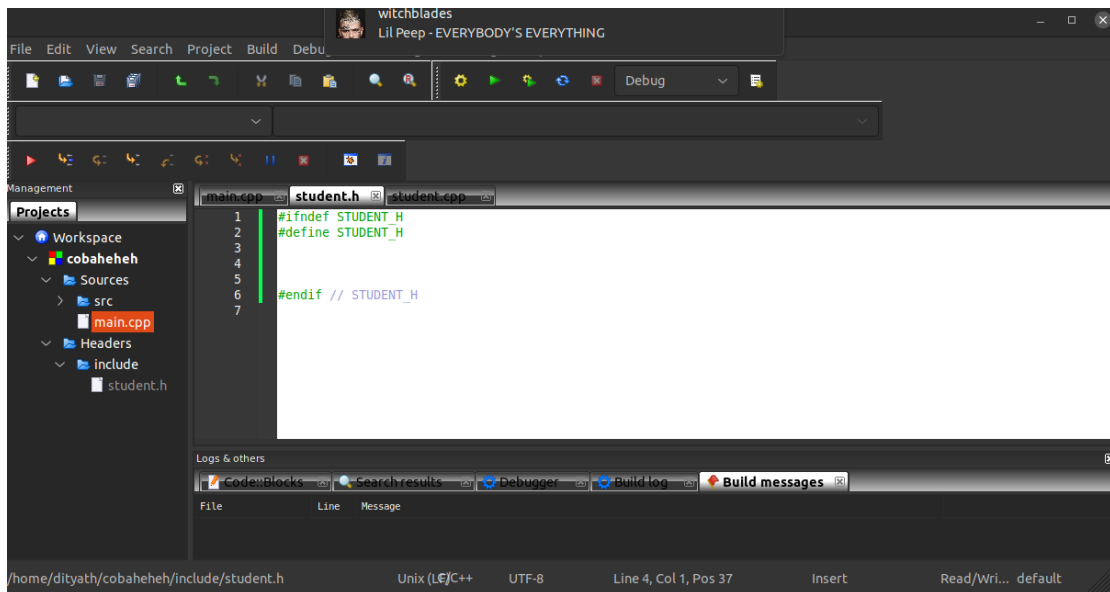


Ditya Athallah  
1301194095

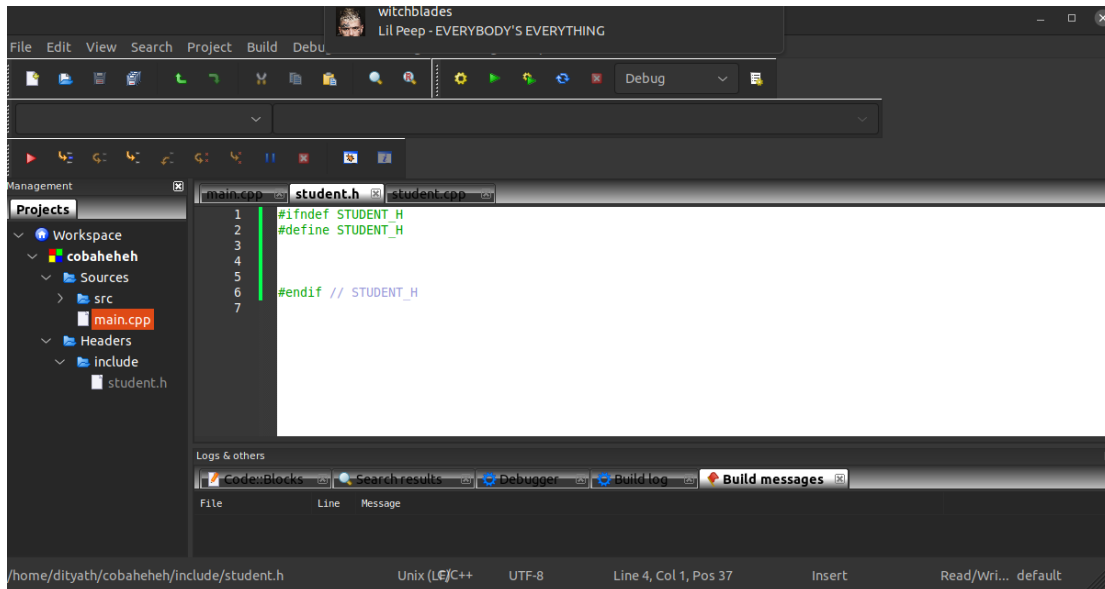
### 1. Create Console App in code::block



### 2. Create student.h

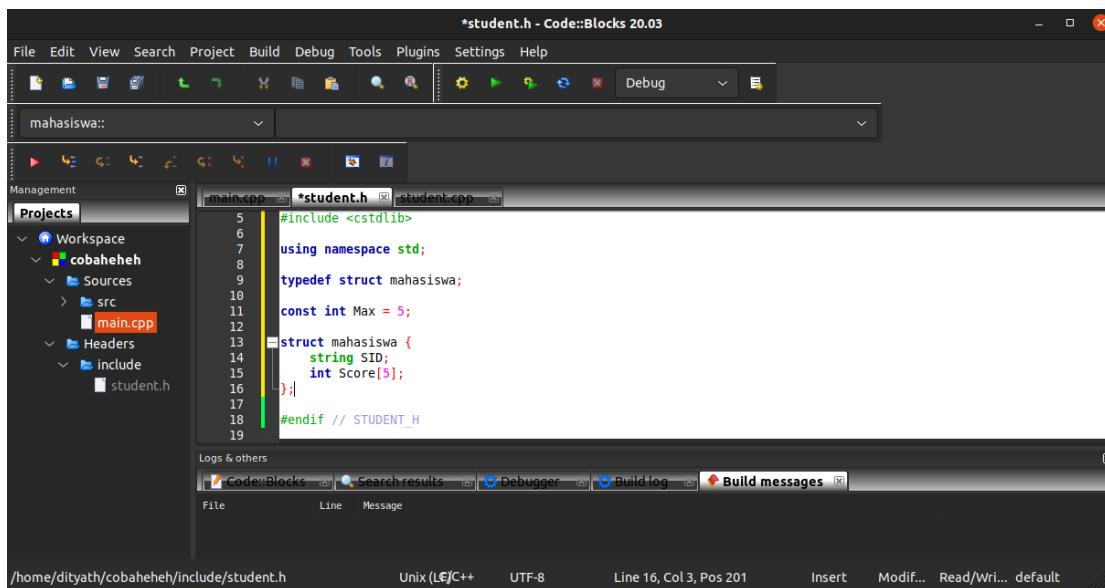


### 3. Create student.cpp

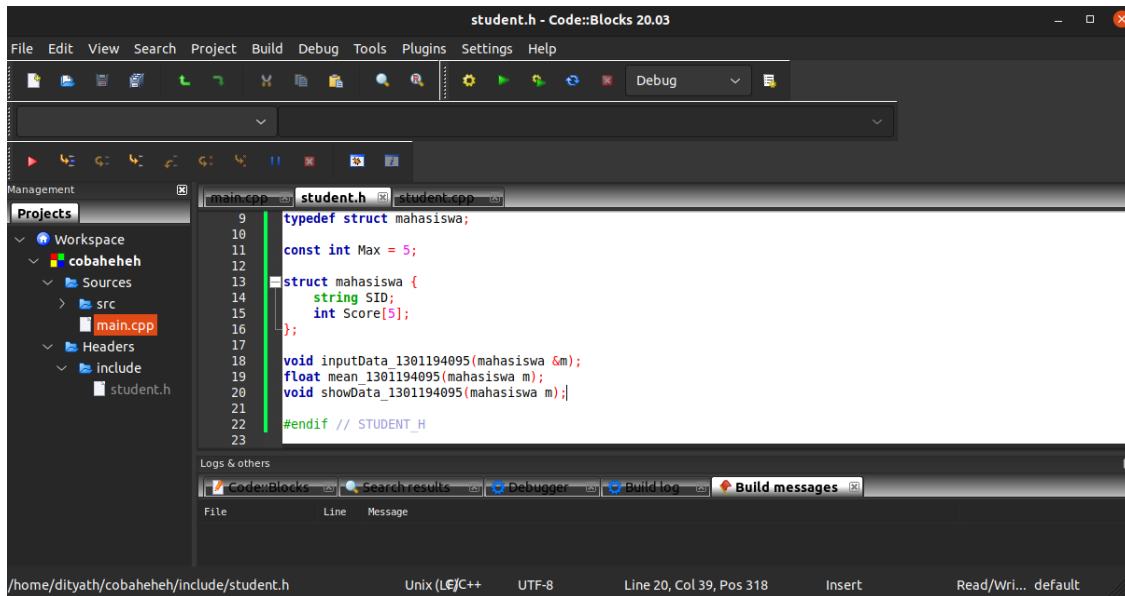


\*sorry for the spotify pop-up, i just finished my assignment when i realized the pop-up :(.  
So I can't redo it ofc.

#### 4. Create adt in student.h



#### 5. Define function and procedure in student.h



6. Student.cpp... I will copy the source code down below. Cuz, it seems like the screenshot looks weird.

Source code:

```
#include "student.h"

void inputData_1301194095(mahasiswa &m) {
    int i;

    cout << "SID : ";
    cin >> m.SID;

    i = 0;
    while (i < Max) {
        cout << "Score " << i+1 << " : ";
        cin >> (m.Score[i]);
        i++;
    }
}

float mean_1301194095(mahasiswa h) {

    float sum = 0;
    for (int i = 0; i < Max; ++i) {
        sum += h.Score[i];
    }

    return sum / 5;
}
```

```

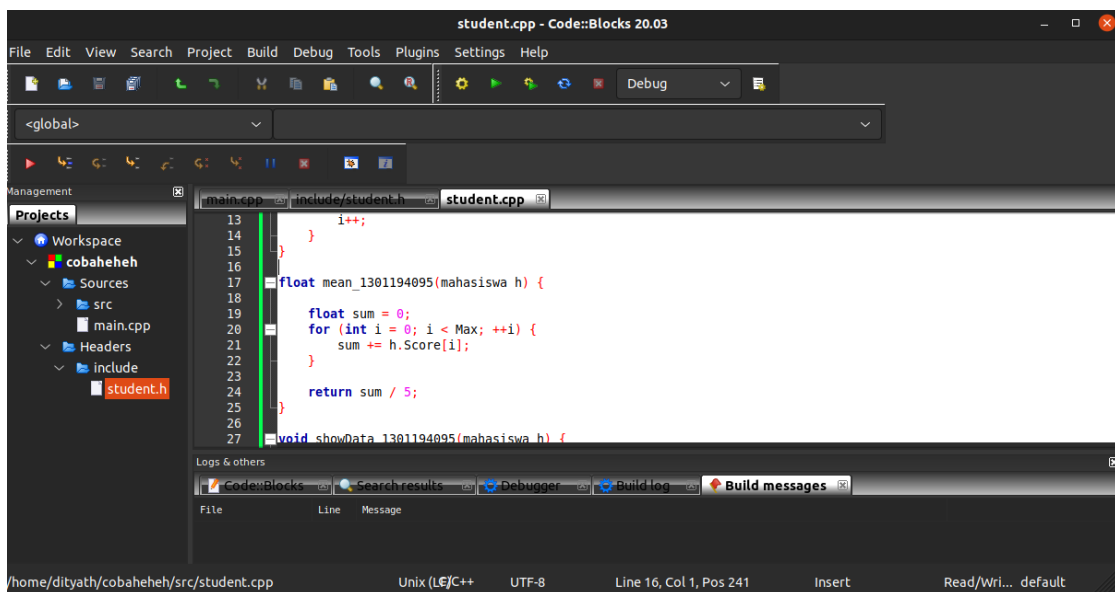
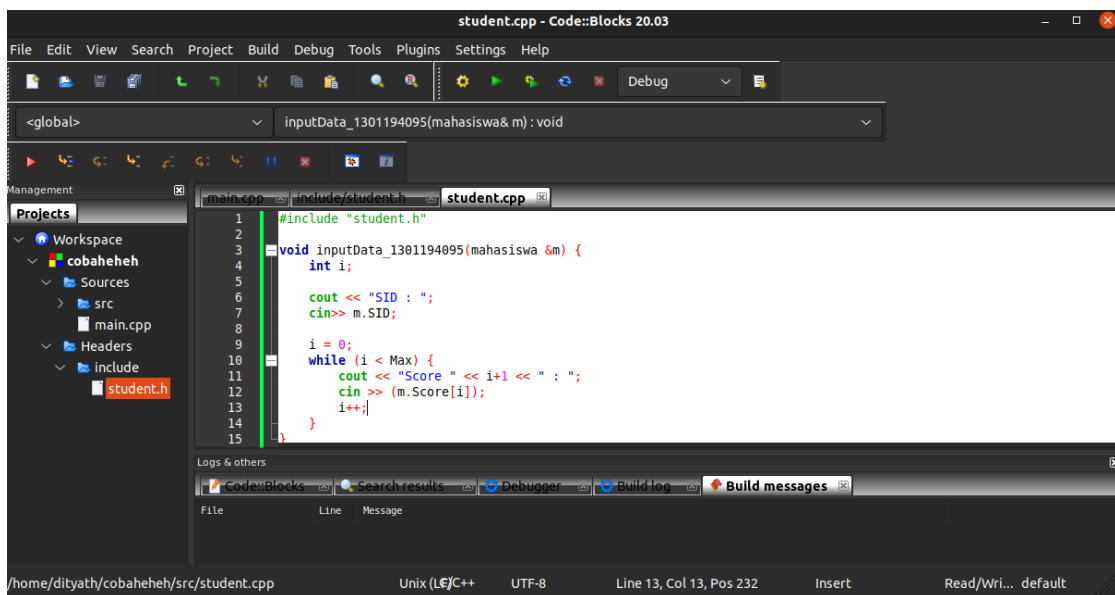
void showData_1301194095(mahasiswa h) {

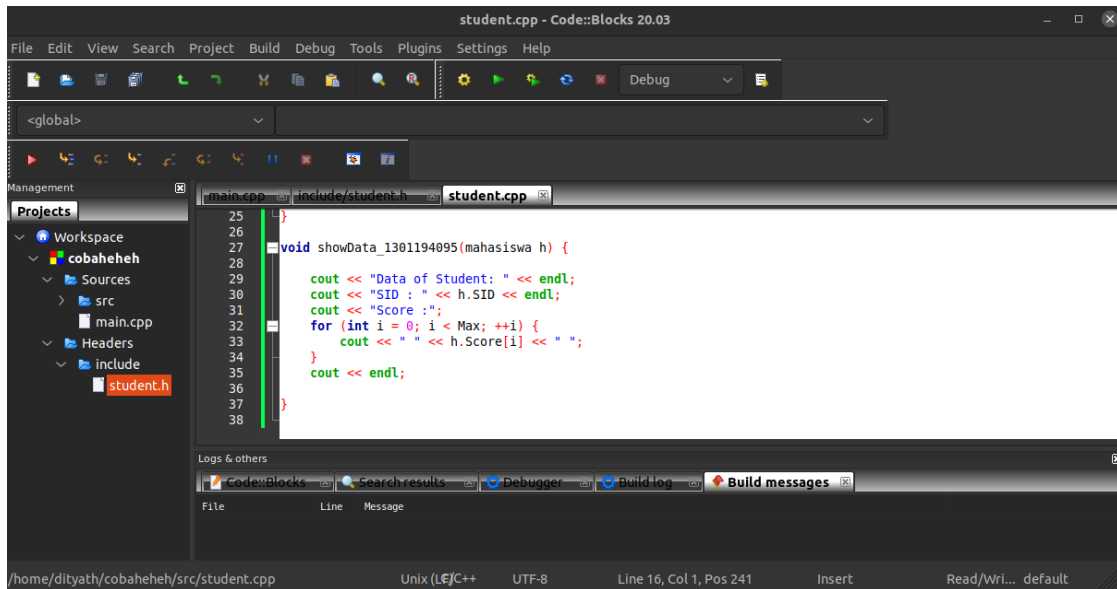
    cout << "Data of Student: " << endl;
    cout << "SID : " << h.SID << endl;
    cout << "Score :";
    for (int i = 0; i < Max; ++i) {
        cout << " " << h.Score[i] << " ";
    }
    cout << endl;

}

```

Screenshot:

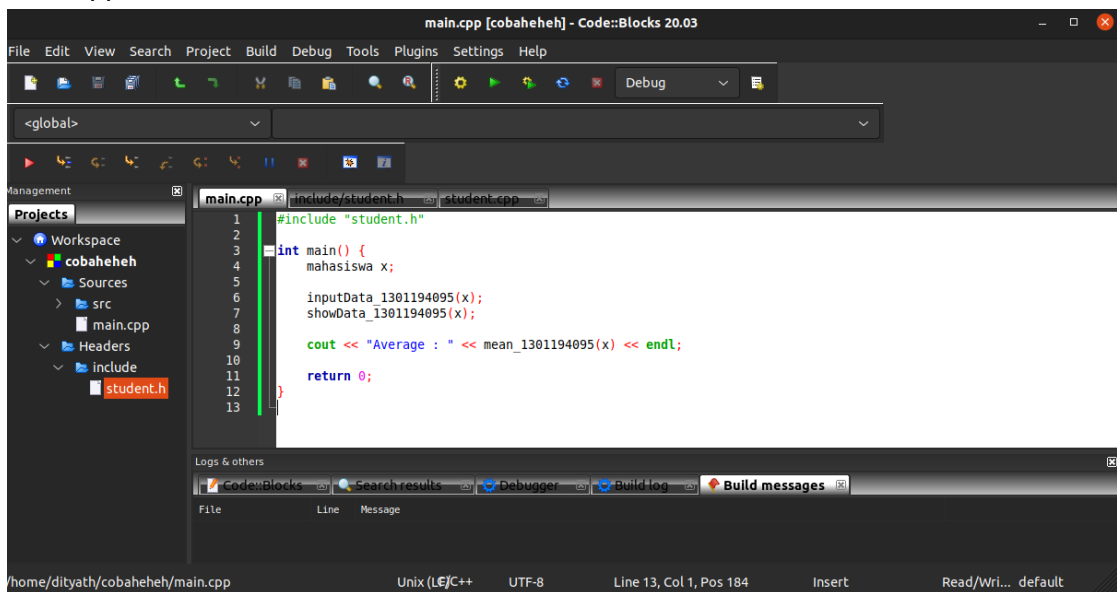




The screenshot shows the Code::Blocks IDE with the file 'student.cpp' open. The left sidebar shows a project named 'cobaheheh' with a source file 'main.cpp' and a header file 'student.h'. The main editor window displays the code for 'student.cpp', which includes a function 'showData\_1301194095' that prints student data. The status bar at the bottom indicates the file is at Line 16, Col 1, Pos 241.

```
25  
26  
27 void showData_1301194095(mahasiswa h) {  
28  
29     cout << "Data of Student: " << endl;  
30     cout << "SID : " << h.SID << endl;  
31     cout << "Score :";  
32     for (int i = 0; i < Max; ++i) {  
33         cout << " " << h.Score[i] << " ";  
34     }  
35     cout << endl;  
36 }  
37  
38
```

## 7. main.cpp



The screenshot shows the Code::Blocks IDE with the file 'main.cpp' open. The left sidebar shows the same project 'cobaheheh' with 'main.cpp' and 'student.h'. The main editor window displays the code for 'main.cpp', which includes the 'student.h' header and calls the 'showData\_1301194095' function. The status bar at the bottom indicates the file is at Line 13, Col 1, Pos 184.

```
1 #include "student.h"  
2  
3 int main() {  
4     mahasiswa x;  
5  
6     inputData_1301194095(x);  
7     showData_1301194095(x);  
8  
9     cout << "Average : " << mean_1301194095(x) << endl;  
10  
11     return 0;  
12 }  
13
```

8. Screenshot of result. I will try 5 different values here since you guys can't try it by yourself.

```
cobaheheh
SID : 1301194095
Score 1 : 90
Score 2 : 70
Score 3 : 60
Score 4 : 50
Score 5 : 40
Data of Student:
SID : 1301194095
Score : 90 70 60 50 40
Average : 62

Process returned 0 (0x0)   execution time : 20,160 s
Press ENTER to continue.
```

```
cobaheheh
SID : 1301194095
Score 1 : 60
Score 2 : 89
Score 3 : 78
Score 4 : 99
Score 5 : 12
Data of Student:
SID : 1301194095
Score : 60 89 78 99 12
Average : 67,6

Process returned 0 (0x0)   execution time : 14,984 s
Press ENTER to continue.
```

```
cobaheheh
SID : 23232
Score 1 : 99
Score 2 : 80
Score 3 : 79
Score 4 : 89
Score 5 : 79
Data of Student:
SID : 23232
Score : 99 80 79 89 79
Average : 85,2

Process returned 0 (0x0)   execution time : 25,603 s
Press ENTER to continue.
```

```
cobaheheh
SID : 1301194095
Score 1 : 13
Score 2 : 15
Score 3 : 25
Score 4 : 64
Score 5 : 32
Data of Student:
SID : 1301194095
Score : 13 15 25 64 32
Average : 29,8

Process returned 0 (0x0)   execution time : 11,760 s
Press ENTER to continue.
```

```
cobaheheh
SID : 1301194095
Score 1 : 690
Score 2 : 903
Score 3 : 789
Score 4 : 986
Score 5 : 356
Data of Student:
SID : 1301194095
Score : 690 903 789 986 356
Average : 744,8

Process returned 0 (0x0)   execution time : 19,587 s
Press ENTER to continue.
```