

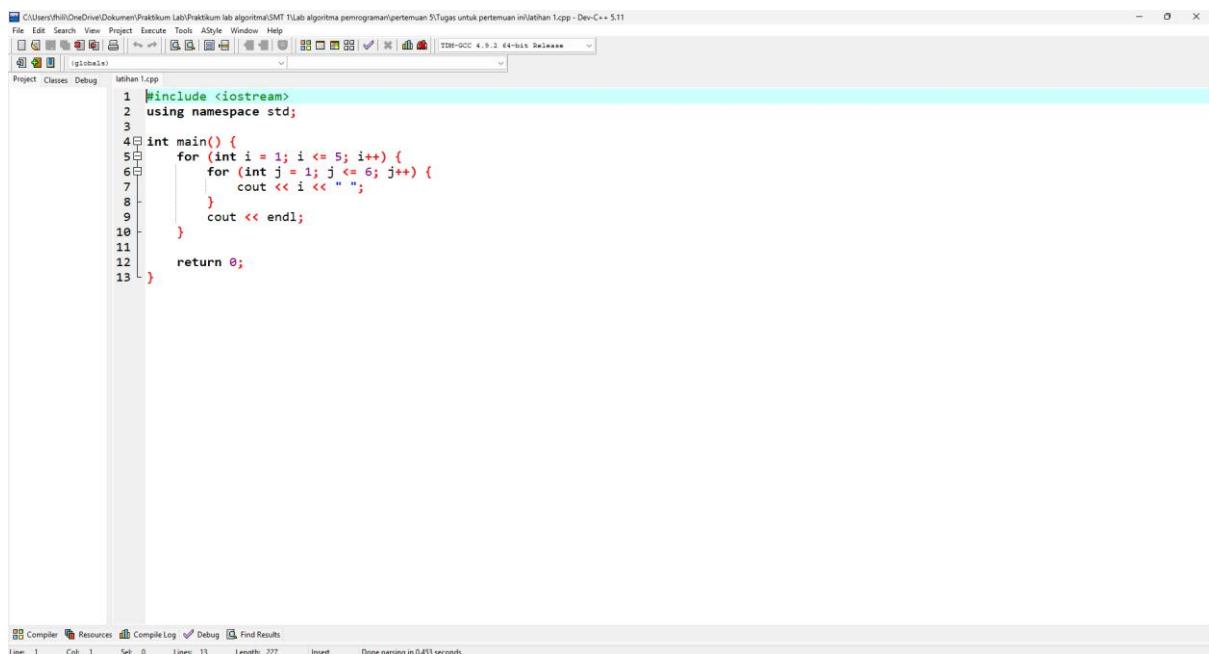
Nama: Philif Diamond Song

Kelas: TI-25-KA

NPM: 252310024

Tugas dan Latihan

Latihan 1:

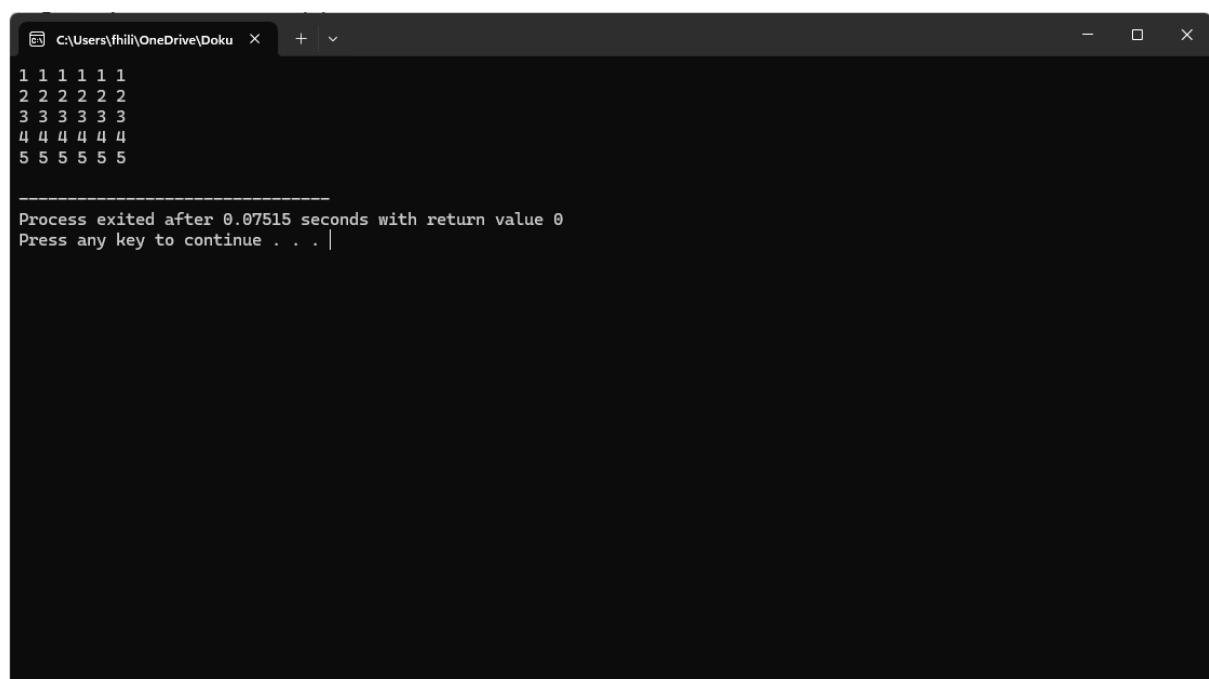


The screenshot shows the Dev-C++ IDE interface. The title bar reads "C:\Users\fhlil\OneDrive\Dokumen\Praktikum Lab\Praktikum lab algoritma\UMT 1\Lab algoritma pemrograman\pertemuan 5\Tugas untuk pertemuan ini\Latihan 1.cpp - Dev-C++ 5.11". The menu bar includes File, Edit, Search, View, Project, Execute, Tools, AStyle, Window, and Help. The toolbar has icons for New, Open, Save, Print, Run, Stop, and Exit. The status bar at the bottom shows "Line: 1 Col: 1 Sel: 0 Lines: 13 Length: 227 Insert Done parsing in 0.453 seconds". The code editor window contains the following C++ code:

```
#include <iostream>
using namespace std;

int main() {
    for (int i = 1; i <= 5; i++) {
        for (int j = 1; j <= 6; j++) {
            cout << i << " ";
        }
        cout << endl;
    }
    return 0;
}
```

Outputnya:



The screenshot shows a terminal window titled "C:\Users\fhlil\OneDrive\Dokument" with a black background and white text. The output of the program is displayed:

```
1 1 1 1 1 1
2 2 2 2 2 2
3 3 3 3 3 3
4 4 4 4 4 4
5 5 5 5 5 5
-----
Process exited after 0.07515 seconds with return value 0
Press any key to continue . . . |
```

Latihan 2:

The screenshot shows the Dev-C++ IDE interface with the following details:

- Title Bar:** C:\Users\thili\OneDrive\Dokumen\Praktikum_Lab\Praktikum lab algoritma\SMIT T1\Lab algoritma pemrograman\pertemuan 5\Tugas untuk pertemuan ini\Program pengulangan.cpp - Dev-C++ 5.11
- Menu Bar:** File, Edit, Search, View, Project, Execute, Tools, AsStyle, Window, Help
- Toolbar:** Includes icons for New, Open, Save, Build, Run, Stop, and others.
- Project Explorer:** Shows "latihan 1.cpp" as the active file.
- Code Editor:** Displays the following C++ code:

```
1 #include <iostream>
2 using namespace std;
3
4 int main()
5{
6    int a;
7
8    cout << "Ini yang pengulangan menaik:" << endl;
9    for(a = 1; a<=10; a++){
10        cout << a << endl;
11    }
12    cout << endl;
13
14
15    cout << "Ini yang pengulangan menurun:" << endl;
16    for (a = 10; a>=1; a--){
17        cout << a << endl;
18    }
19}
20 }
```
- Bottom Navigation Bar:** Compiler, Resources, Compile Log, Debug, Find Results

Outputnya:

```
C:\Users\hili\OneDrive\Doku + | 
Ini yang pengulangan menaik:
1
2
3
4
5
6
7
8
9
10

Ini yang pengulangan menurun:
10
9
8
7
6
5
4
3
2
1

Process exited after 0.03899 seconds with return value 0
Press any key to continue . . . |
```

Latihan 3:

The screenshot shows the Dev-C++ IDE interface. The code editor window displays a C++ program named 'segitiga bintang.cpp'. The code prints a right-angled triangle pattern of asterisks based on user input. The code uses two nested loops: an outer loop for rows and an inner loop for columns. The output window shows the resulting triangle for an input of 3.

```
1 #include <iostream>
2 using namespace std;
3
4 int main() {
5     int tinggi, i, j;
6
7     cout << "Segitiga Bintang" << endl;
8     cout << "=====*" << endl << endl;
9
10    cout << "Input tinggi segitiga: ";
11    cin >> tinggi;
12    cout << endl;
13
14    for(i = 1; i <= tinggi; i++) {
15        for(j = 1; j <= i; j++) {
16            cout << "* ";
17        }
18        cout << endl;
19    }
20
21    return 0;
22 }
```

Outputnya:

The screenshot shows a terminal window titled 'C:\Users\fhil\OneDrive\Doku'. It displays the execution of the 'segitiga bintang' program. The user inputs '3' when prompted for the triangle height. The program outputs a right-angled triangle of asterisks. The terminal also shows the process exit information and a prompt to press any key to continue.

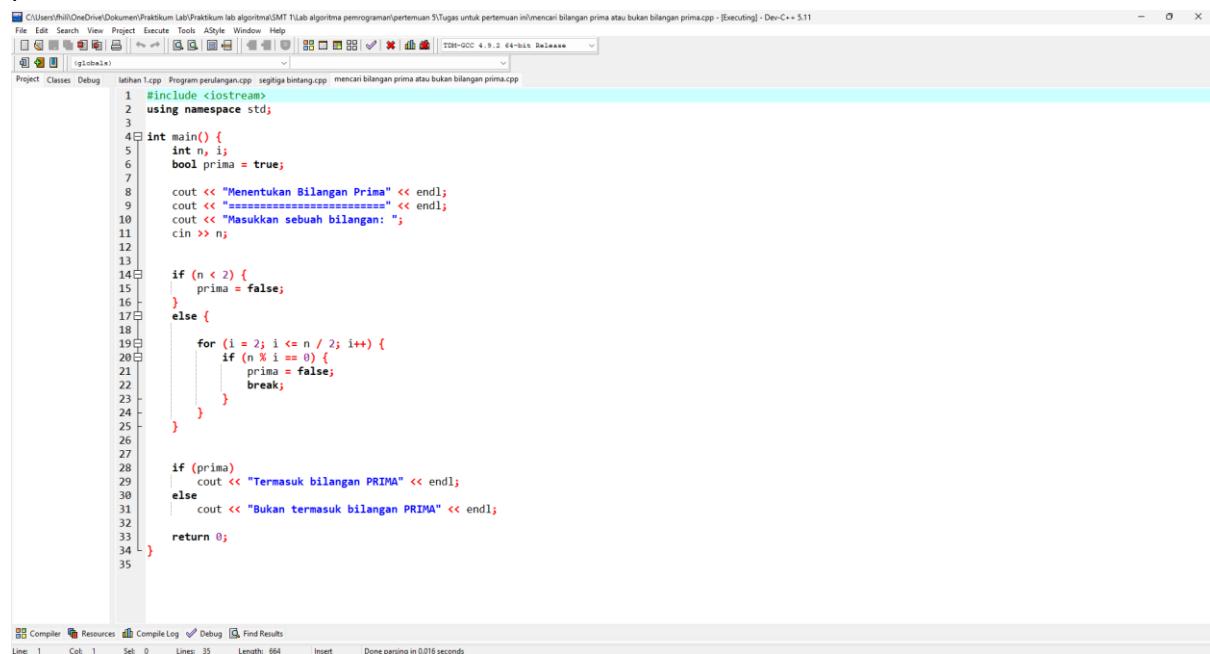
```
Segitiga Bintang
=====
Input tinggi segitiga: 3

*
* *
* * *

Process exited after 5.891 seconds with return value 0
Press any key to continue . . . |
```

Latihan 4:

Buat program mencari bilangan Prima, yaitu termasuk bilangan prima atau tidak bilangan prima:

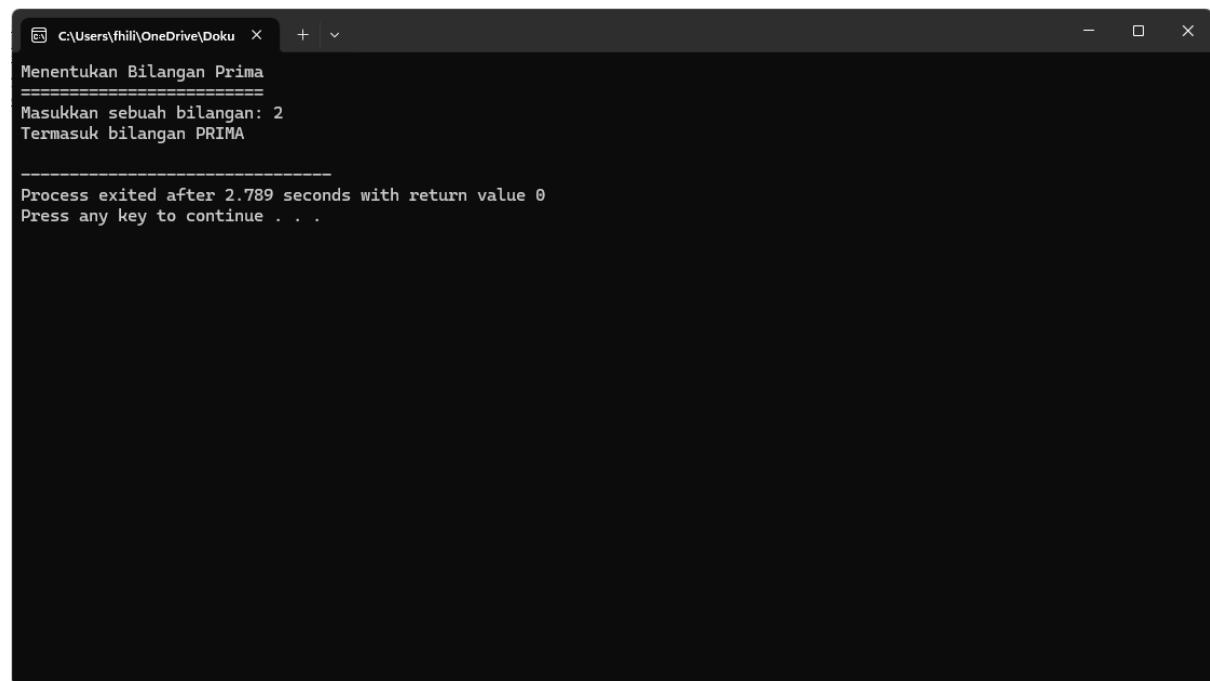


The screenshot shows the Dev-C++ IDE interface. The project name is "latihan 1.cpp". The code is as follows:

```
1 #include <iostream>
2 using namespace std;
3
4 int main() {
5     int n, i;
6     bool prima = true;
7
8     cout << "Menentukan Bilangan Prima" << endl;
9     cout << "=====";
10    cout << "Masukkan sebuah bilangan: ";
11    cin >> n;
12
13    if (n < 2) {
14        prima = false;
15    }
16    else {
17
18        for (i = 2; i <= n / 2; i++) {
19            if (n % i == 0) {
20                prima = false;
21                break;
22            }
23        }
24    }
25
26
27    if (prima)
28        cout << "Termasuk bilangan PRIMA" << endl;
29    else
30        cout << "Bukan termasuk bilangan PRIMA" << endl;
31
32    return 0;
33
34 }
```

The status bar at the bottom indicates: Line 1 Col 1 Sel 0 Lines: 35 Length: 664 Insert Done parsing in 0.016 seconds.

Outputnya ketika termasuk bilangan Prima:



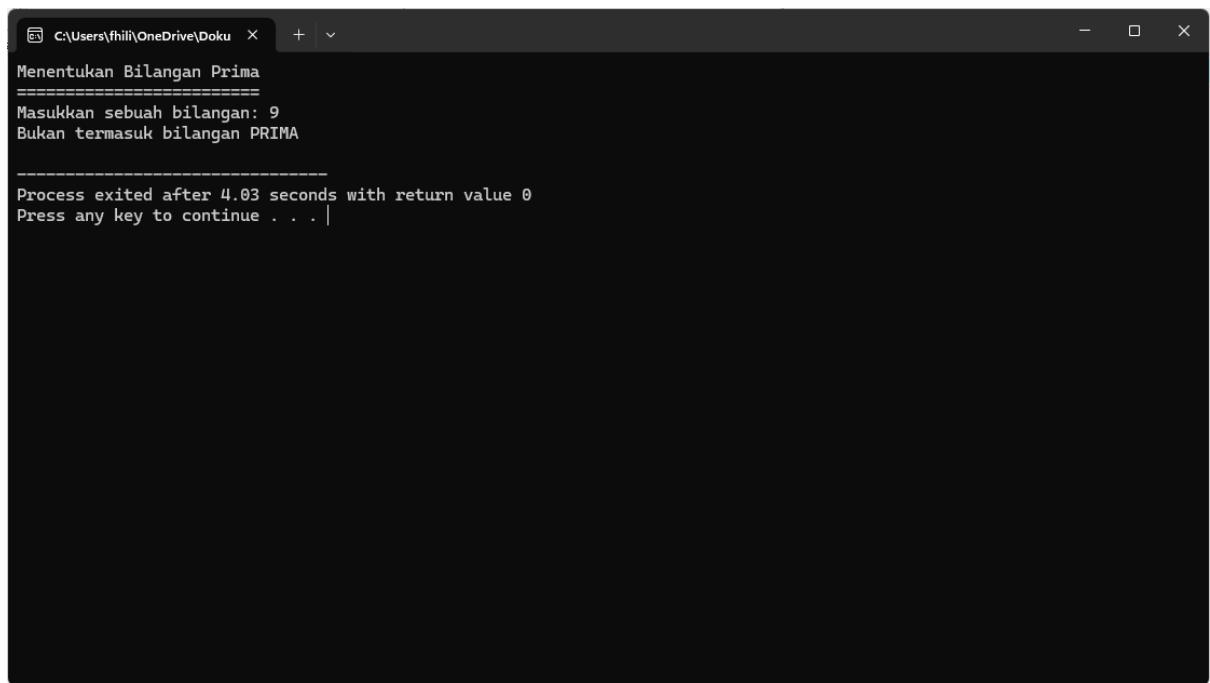
The terminal window shows the following output:

```
C:\Users\fhlh\OneDrive\Kuliah\Praktikum Lab\Praktikum lab algoritma\SMPT\Lab algoritma pemrograman\pertemuan 5\Tugas untuk pertemuan ini\mencari bilangan prima atau bukan bilangan prima.cpp [Executing] - Dev-C++ 5.11
```

```
Menentukan Bilangan Prima
=====
Masukkan sebuah bilangan: 2
Termasuk bilangan PRIMA

-----
Process exited after 2.789 seconds with return value 0
Press any key to continue . . .
```

Outpt ketika tidak termasuk bilangan Prima:



```
C:\Users\fili\OneDrive\Doku > Menentukan Bilangan Prima  
=====  
Masukkan sebuah bilangan: 9  
Bukan termasuk bilangan PRIMA  
-----  
Process exited after 4.03 seconds with return value 0  
Press any key to continue . . . |
```