

Marvel Sanjaya Setiawan

2311104053

S1SE07-02

Tugas Pendahuluan Modul 1 STRUKTUR DATA - Ganjil 2024/2025

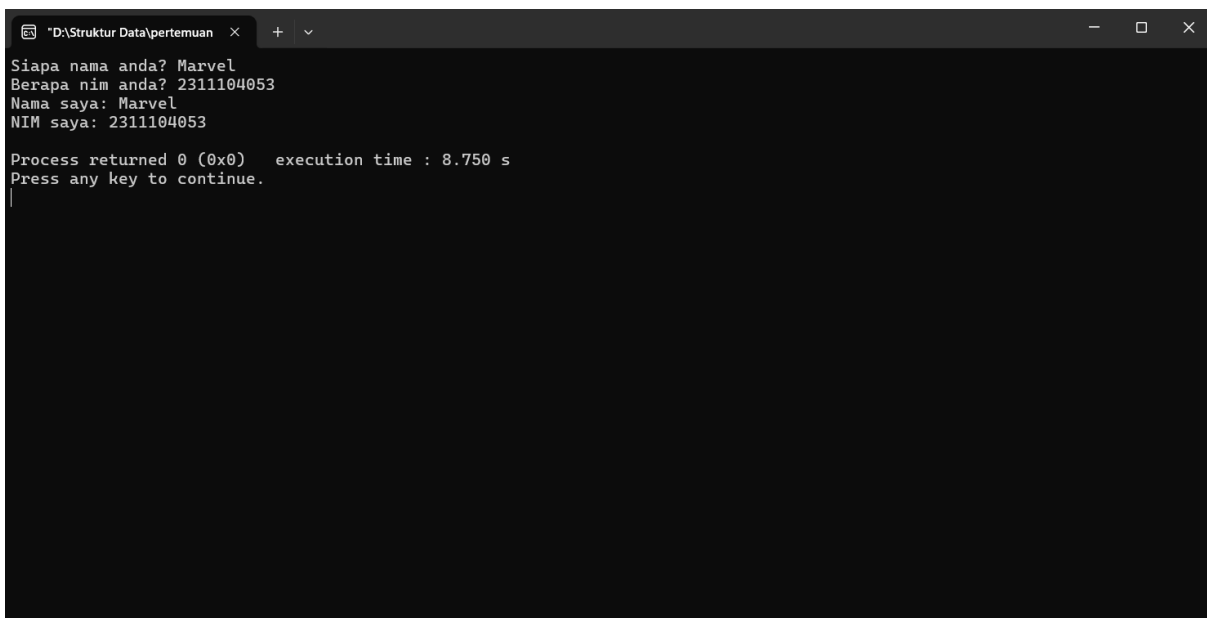
"Pengengenalan C++: Subprogram & Array"

1.

```
#include <iostream>

using namespace std;

int main(){
    string nama, nim;
    cout << "Siapa nama anda? ";
    cin >> nama;
    cout << "Berapa nim anda? ";
    cin >> nim;
    cout << "Nama saya: " << nama << endl;
    cout << "NIM saya: " << nim << endl;
    return 0;
}
```

A screenshot of a Windows terminal window showing the execution of a C++ program. The window title is "D:\Struktur Data\pertemuan". The program prompts the user for their name and NIM, which are entered as "Marvel" and "2311104053" respectively. The program then outputs the entered values. At the bottom, it shows "Process returned 0 (0x0) execution time : 8.750 s" and "Press any key to continue.".

```
"D:\Struktur Data\pertemuan" x + v
Siapa nama anda? Marvel
Berapa nim anda? 2311104053
Nama saya: Marvel
NIM saya: 2311104053

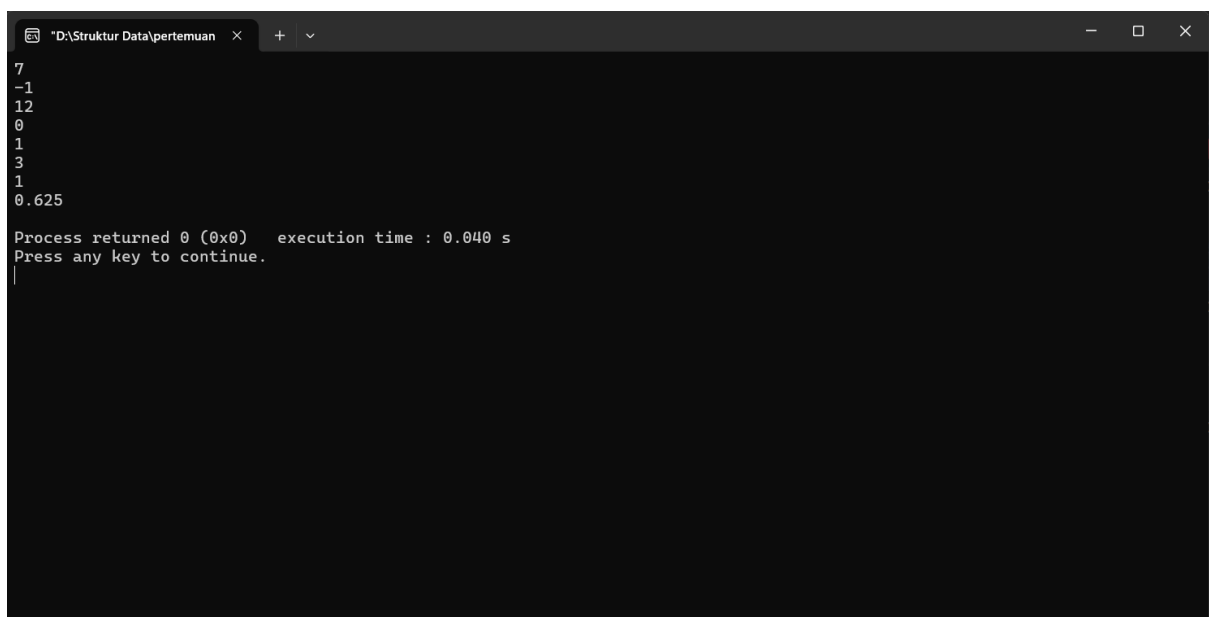
Process returned 0 (0x0) execution time : 8.750 s
Press any key to continue.
```

2.

```
#include <iostream>

using namespace std;

int main(){
    int bil1 = 3, bil2 = 4, hasil1;
    float bil3 = 3.0, bil4 = 4.8, hasil2;
    hasil1 = bil1 + bil2;
    cout << hasil1 << endl;
    hasil1 = bil1 - bil2;
    cout << hasil1 << endl;
    hasil1 = bil1 * bil2;
    cout << hasil1 << endl;
    hasil1 = bil1 / bil2; // integer division
    cout << hasil1 << endl;
    hasil1 = bil2 / bil1; // integer division
    cout << hasil1 << endl;
    hasil1 = bil1 % bil2; // modulo
    cout << hasil1 << endl;
    hasil1 = bil2 % bil1; // modulo
    cout << hasil1 << endl;
    hasil2 = bil3 / bil4;
    cout << hasil2 << endl;
    return 0;
}
```



```
"D:\Struktur Data\pertemuan" x + v
7
-1
12
0
1
3
1
0.625

Process returned 0 (0x0) execution time : 0.040 s
Press any key to continue.
```

3.

```
#include <iostream>

using namespace std;

int main(){
    int bil1 = 2, bil2 = 3, hasil;
    hasil = bil1 > bil2;
    cout << hasil << endl;
    hasil = bil1 >= bil2;
    cout << hasil << endl;
    hasil = bil1 < bil2;
    cout << hasil << endl;
    hasil = bil1 <= bil2;
    cout << hasil << endl;
    hasil = bil1 == bil2;
    cout << hasil << endl;
    hasil = bil1 != bil2;
    cout << hasil << endl;
    return 0;
}
```

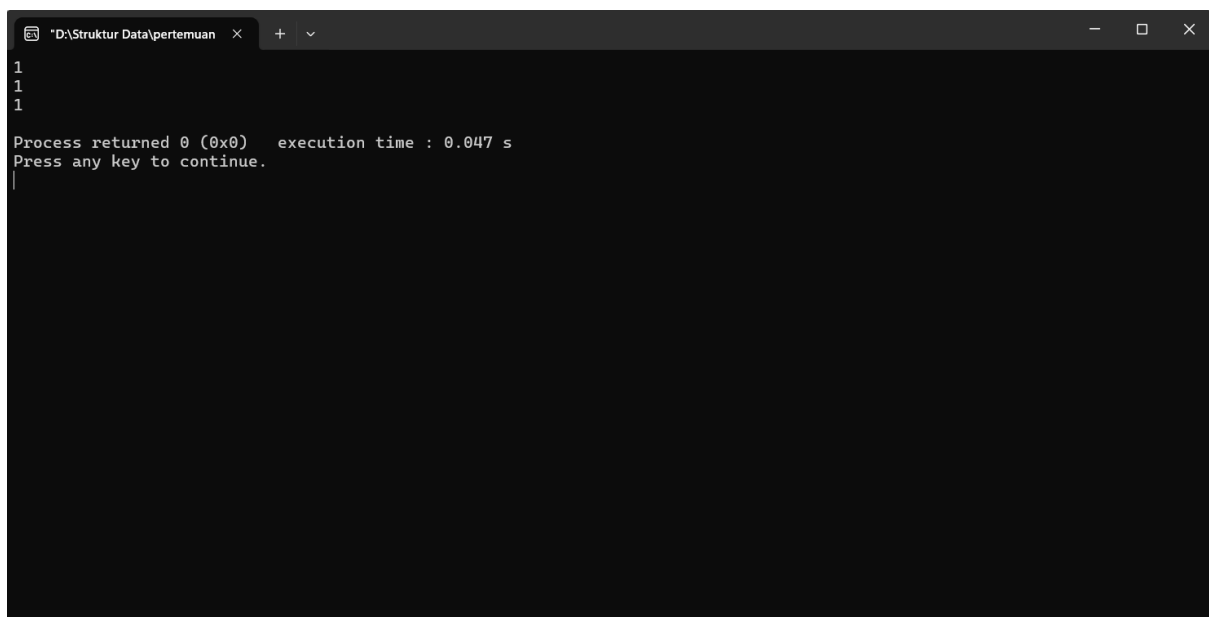
```
"D:\Struktur Data\pertemuan" x + v
0
0
1
1
0
0
1
Process returned 0 (0x0)   execution time : 0.037 s
Press any key to continue.
```

4.

```
#include <iostream>

using namespace std;

int main(){
    int bil1 = 2, bil2 = 3, hasil;
    hasil = bil1 <= bil2 and bil1 < bil2;
    cout << hasil << endl;
    hasil = bil1 >= bil2 or bil1 < bil2;
    cout << hasil << endl;
    hasil = not(bil1 >= bil2) or bil1 < bil2;
    cout << hasil << endl;
    return 0;
}
```

A screenshot of a Windows command prompt window. The title bar shows the file path "D:\Struktur Data\pertemuan" and standard window controls. The command prompt displays the output of the C++ program: three lines of "1", followed by "Process returned 0 (0x0) execution time : 0.047 s" and "Press any key to continue.". The cursor is positioned on the line "Press any key to continue.".

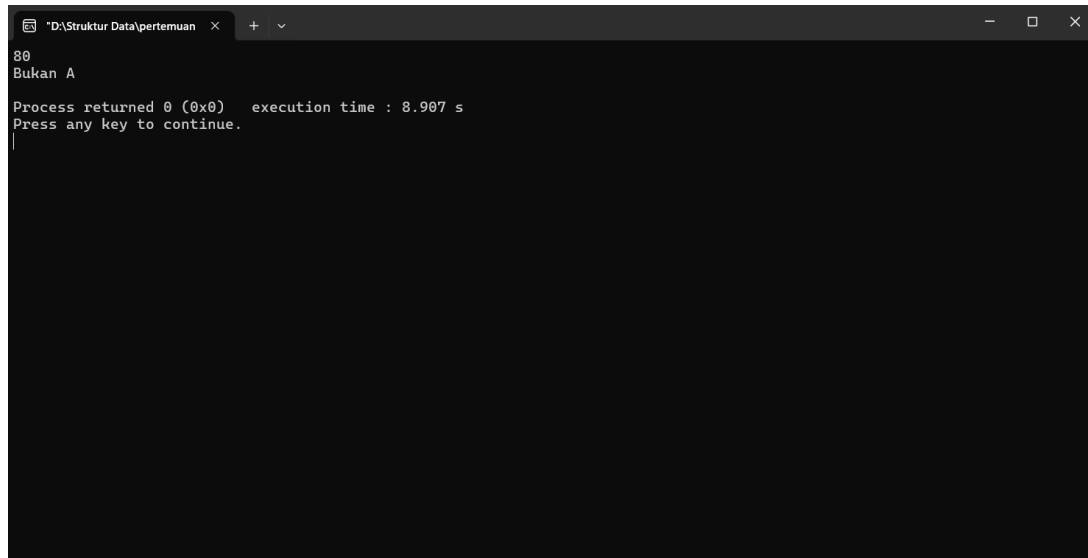
```
"D:\Struktur Data\pertemuan" x + v
1
1
1
Process returned 0 (0x0) execution time : 0.047 s
Press any key to continue.
|
```

5.

```
#include <iostream>

using namespace std;

int main(){
    int nilai;
    cin >> nilai;
    if (nilai > 80) {
        cout << "A" << endl;
    } else {
        cout << "Bukan A" << endl;
    }
    return 0;
}
```



The screenshot shows a terminal window with a dark background. The title bar at the top reads "D:\Struktur Data\pertemuan" followed by a close button. The terminal content shows the program's execution: it prompts for input with "80", outputs "Bukan A", and then displays the status "Process returned 0 (0x0) execution time : 8.907 s" and "Press any key to continue." before a cursor line.

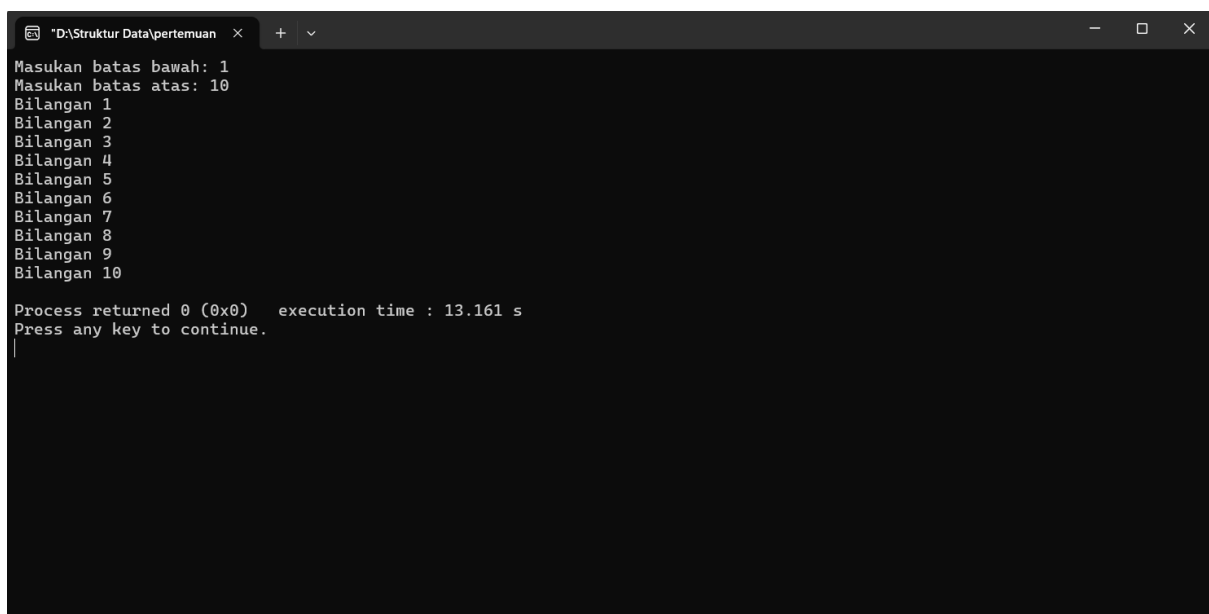
```
"D:\Struktur Data\pertemuan" x + - x
80
Bukan A
Process returned 0 (0x0) execution time : 8.907 s
Press any key to continue.
|
```

6.

```
#include <iostream>

using namespace std;

int main(){
    int a, b, bilangan;
    cout << "Masukan batas bawah: ";
    cin >> a;
    cout << "Masukan batas atas: ";
    cin >> b;
    for (bilangan = a; bilangan <= b; bilangan++) {
        cout << "Bilangan " << bilangan << endl;
    }
    return 0;
}
```



The screenshot shows a Windows command prompt window with the title bar "D:\Struktur Data\pertemuan". The program has been executed, and the output is displayed. The user has entered 1 for the lower bound and 10 for the upper bound. The program then prints numbers from 1 to 10, each on a new line. At the bottom, it shows "Process returned 0 (0x0) execution time : 13.161 s" and "Press any key to continue." followed by a vertical bar character.

```
"D:\Struktur Data\pertemuan" x + v
Masukan batas bawah: 1
Masukan batas atas: 10
Bilangan 1
Bilangan 2
Bilangan 3
Bilangan 4
Bilangan 5
Bilangan 6
Bilangan 7
Bilangan 8
Bilangan 9
Bilangan 10

Process returned 0 (0x0) execution time : 13.161 s
Press any key to continue.
|
```

7.

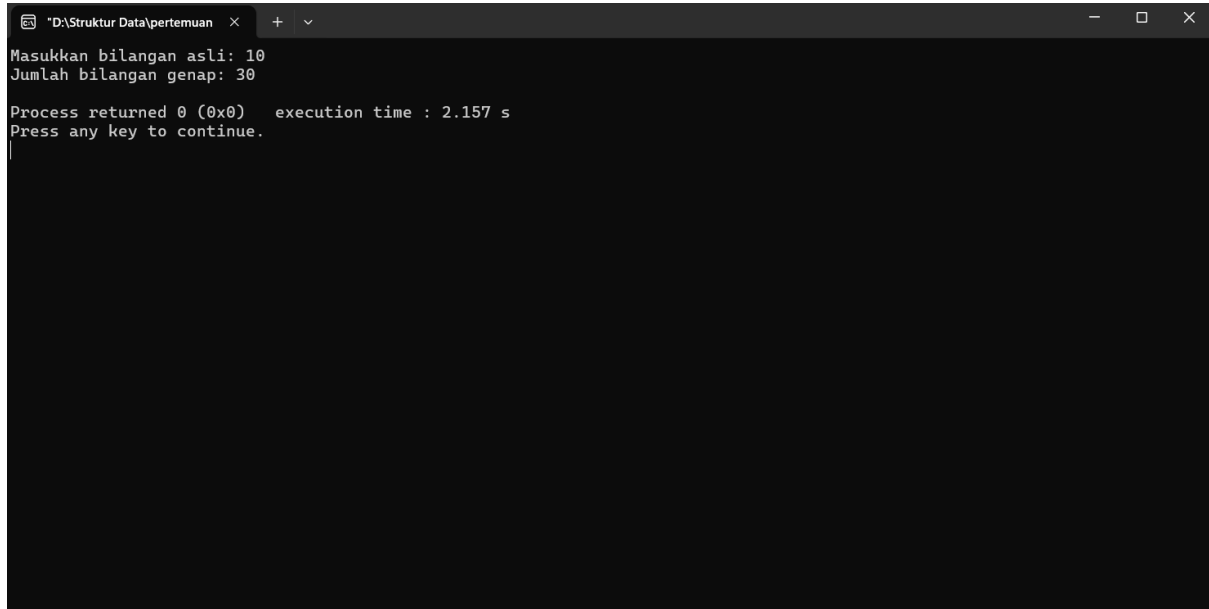
```
#include <iostream>

using namespace std;

int main(){
    int bilangan, asli, jumlah;

    cout << "Masukkan bilangan asli: ";
    cin >> asli;

    bilangan = 1;
    jumlah = 0;
    while (bilangan <= asli) {
        if (bilangan % 2 == 0) {
            jumlah += bilangan;
        }
        bilangan++;
    }
    cout << "Jumlah bilangan genap: " << jumlah << endl;
    return 0;
}
```



The screenshot shows a terminal window with the following output:

```
"D:\Struktur Data\pertemuan" x + v
Masukkan bilangan asli: 10
Jumlah bilangan genap: 30

Process returned 0 (0x0)   execution time : 2.157 s
Press any key to continue.
```

The terminal window has a title bar with the file path "D:\Struktur Data\pertemuan" and standard window controls. The output shows the program successfully calculated the sum of even numbers from 1 to 10, which is 30.