Tugas Pendahuluan Modul 1 – Struktur Data

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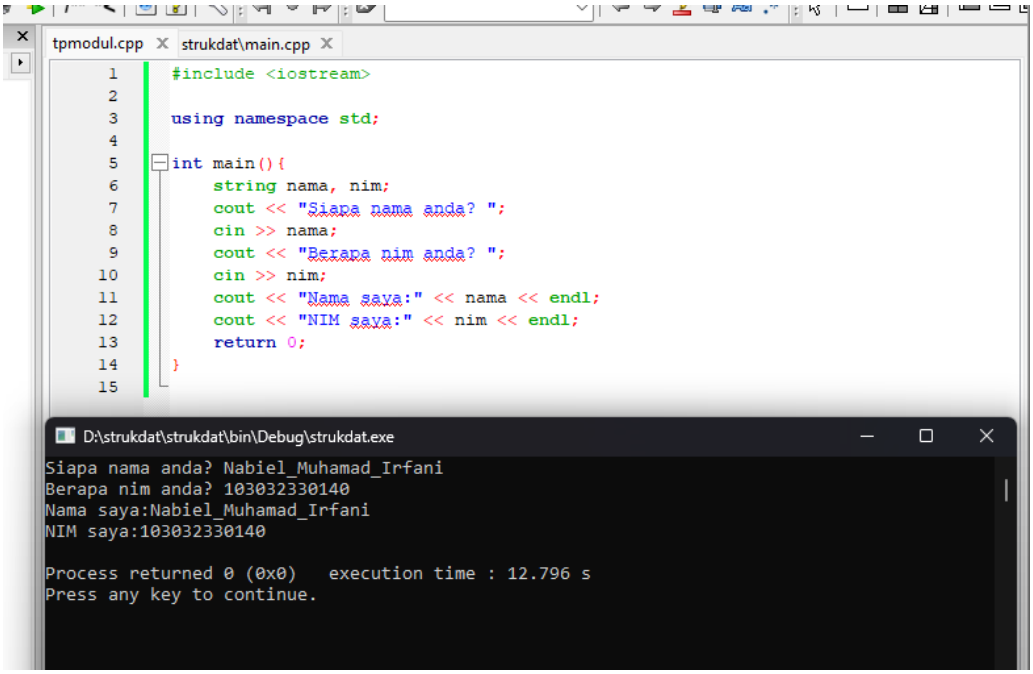
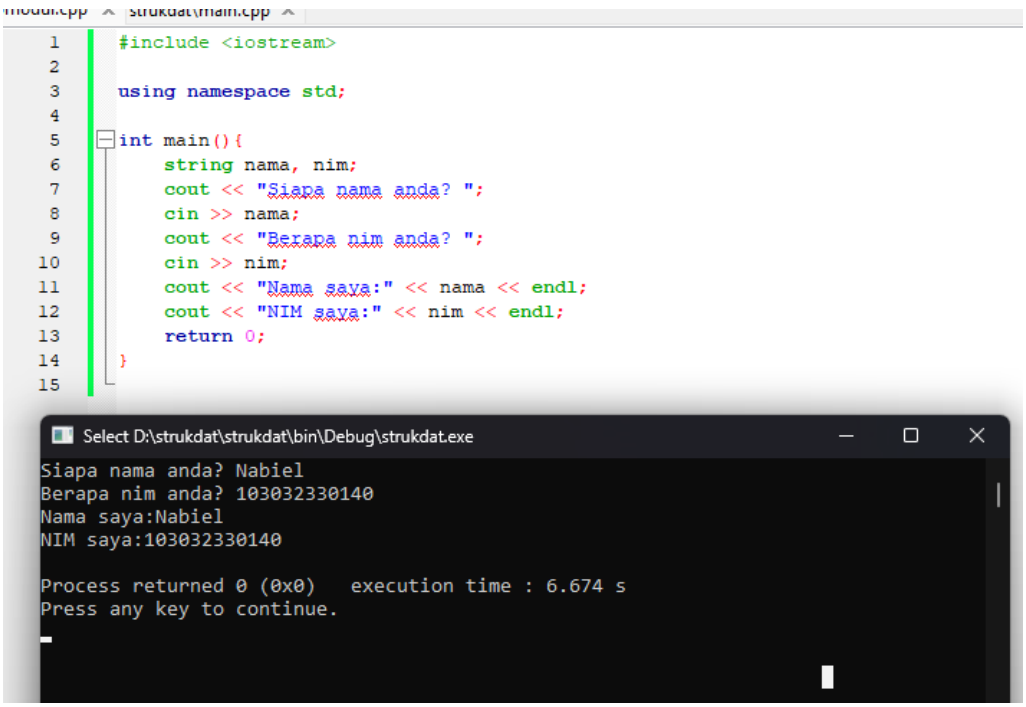
1. (Input/Output) A dan B





2. (Operasi Aritmatika)

nodul.cpp | strukdat\main.cpp

```cpp
#include <iostream>

using namespace std;

int main(){
    int bil1 = 3, bil2 = 4, hasil1;
    float bil3 = 3.0, bil4 = 4.0, hasil2;
    hasil1 = bil1 + bil2;
    cout << hasil1 << endl;
    hasil1 = bil1 - bil2;
    cout << hasil1 << endl;
    hasil1 = bil1 * bil2;
    cout << hasil1 << endl;
    hasil1 = bil1 / bil2;
    cout << hasil1 << endl;
    hasil1 = bil2 / bil1;
    cout << hasil1 << endl;
    hasil1 = bil1 % bil2;
    cout << hasil1 << endl;
    hasil1 = bil2 % bil1;
    cout << hasil1 << endl;
    hasil2 = bil3 / bil4;
    cout << hasil2 << endl;
    return 0;
    }
```

```
D:\strukdat\strukdat\bin\Debug\strukdat.exe
7
-1
12
0
1
3
1
0.75

Process returned 0 (0x0)   execution time : 0.019 s
Press any key to continue.
```

3. (Operasi Perbandingan)

modul.cpp | strukdat\main.cpp

```cpp
#include <iostream>

using namespace std;

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

```
D:\strukdat\strukdat\bin\Debug\strukdat.exe
0
0
1
1
0
1

Process returned 0 (0x0)   execution time : 0.039 s
Press any key to continue.
```

4. (Operasi Logika)

modul.cpp | strukdat\main.cpp

```cpp
#include <iostream>

using namespace std;

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

```
D:\strukdat\strukdat\bin\Debug\strukdat.exe
1
1
1

Process returned 0 (0x0)   execution time : 0.038 s
Press any key to continue.
```

5. (Percabangan If – Else)

nodul.cpp | strukdat\main.cpp

```cpp
#include <iostream>

using namespace std;

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

```
D:\strukdat\strukdat\bin\Debug\strukdat.exe
79
Bukan A

Process returned 0 (0x0)   execution time : 2.871 s
Press any key to continue.
```

pmodul.cpp | strukdat\main.cpp

```cpp
#include <iostream>

using namespace std;

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

```
D:\strukdat\strukdat\bin\Debug\strukdat.exe
80
Bukan A

Process returned 0 (0x0)   execution time : 2.422 s
Press any key to continue.
```

```cpp
#include <iostream>

using namespace std;

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

```
D:\strukdat\strukdat\bin\Debug\strukdat.exe
81
A

Process returned 0 (0x0)   execution time : 1.736 s
Press any key to continue.
```

6. (Perulangan For-To-Do)

```cpp
#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;
}
```

```
D:\strukdat\strukdat\bin\Debug\strukdat.exe
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 : 10.353 s
Press any key to continue.
```

7. (Perulangan while – do)

nodul.cpp | strukdat\main.cpp

```cpp
#include <iostream>

using namespace std;

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

    cout << "Masukan 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;
}
```

```
D:\strukdat\strukdat\bin\Debug\strukdat.exe
Masukan bilangan asli: 10
Jumlah bilangan genap: 30

Process returned 0 (0x0)   execution time : 2.026 s
Press any key to continue.
```