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Kelas: SE-06-02

# Tugas Pendahuluan Modul 1 STRUKTUR DATA - Ganjil 2024/2025

"Pengenalan C++: Subprogram & Array"

## A. Ketentuan Tugas Pendahuluan

- 1. Tugas Pendahuluan dikerjakan secara Individu.
- 2. TP ini bersifat WAJIB, tidak mengerjakan = PENGURANGAN POIN JURNAL / TES ASESMEN.
- 3. Hanya MENGUMPULKAN tetapi TIDAK MENGERJAKAN = PENGURANGAN POIN JURNAL / TES ASESMEN.
- 4. Deadline pengumpulan TP Modul 2 adalah Senin, 30 September 2024 pukul 07.30 WIB.
- 5. TIDAK ADA TOLERANSI KETERLAMBATAN, TERLAMBAT ATAU TIDAK MENGUMPULKAN TP MAKA DIANGGAP TIDAK MENGERJAKAN.
- 6. DILARANG PLAGIAT (PLAGIAT = E).
- 7. Kerjakan TP dengan jelas agar dapat dimengerti.
- 8. Codingan diupload di Github dan upload Laporan di Lab menggunakan format PDF dengan ketentuan:

  TP\_MOD\_[XX]\_NIM\_NAMA.pdf

#### CP (WA):

- Andini (082243700965)
- Aldi (081223968645)

SELAMAT MENGERJAKAN^^

#### B. Soal Tugas Pendahuluan

1. (Input/Output) Tuliskan kode berikut dan jalankan. a) Masukkan nama lengkap anda dan nim anda. Screenshot kode dan hasilnya, lalu tempelkan pada jawaban. b) Masukkan nama pertama anda dan nim anda. Screenshot kode dan hasilnya, lalu tempelkan pada jawaban.

```
amain.cpp ×
              #include <iostream>
       2
       3
              using namespace std;
       4
       5
              int main(){
       6
                  string nama, nim;
       7
                  cout << "Siapa nama anda? ";
       8
                  cin >> nama;
      9
                  cout << "Berapa nim anda? ";
      10
                  cin >> nim;
                  cout << "Nama saya:" << nama << endl;
      11
                  cout << "NIM saya:" << nim << endl;</pre>
      12
      13
                  return 0;
             }
      14
main.cpp [Soal TP] - Code::Blocks 20.03
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                     main.cop X
Projects Files FSy
                               #include <iostream>

    ₩orkspace

 Soal TP
                               using namespace std;
   int main()
      main.cpp
                          6
                                    string nama, nim;
                                                                                                           Sa
                                    cout << "Siapa nama anda? ";</pre>
                          8
                                   cin >> nama;
                                    cout << "Berapa nim anda? ";</pre>
                          10
                          11
                                    cin >> nim;
                                   cout << "Nama saya:" << nama << endl;
cout << "NIM saya:" << nim << endl;</pre>
                          12
                          13
                                    return 0;
                          14
                          15
                     Select "D:\Prsktikum Struktur Data\Soal TP\bin\Debug\Soal TP.exe"
                     Siapa nama anda? SatriaAriqAdelardDompas
                     Berapa nim anda? 2211104033
                     Nama saya:SatriaAriqAdelardDompas
                     NIM saya:2211104033
                     Process returned 0 (0x0) execution time : 13.858 s
                     Press any key to continue.
```

2. (Operasi aritmatika) Tuliskan kode berikut dan jalankan. Screenshot kode dan hasilnya, lalu tempelkan pada jawaban.

```
amain.cpp ×
                #include <iostream>
        2
        3
                using namespace std;
        4
        5
                int main(){
                      int bil1 = 3, bil2 = 4, hasil1;
        6
                      float bil3 = 3.0, bil4 = 4.0, hasil2;
        8
                      hasil1 = bil1 + bil2;
                      cout << hasil1 << endl;</pre>
        9
                      hasil1 = bil1 - bil2;
      10
      11
                      cout << hasil1 << endl;</pre>
                      hasil1 = bil1 * bil2;
      12
      13
                      cout << hasil1 << endl;</pre>
      14
                      hasil1 = bil1 / bil2;
                                                     // integer division
      15
                      cout << hasil1 << endl;</pre>
                      hasil1 = bil2 / bil1; // integer division
      16
      17
                      cout << hasil1 << endl;</pre>
      18
                      hasil1 = bil1 % bil2; // modulo
      19
                      cout << hasil1 << endl:
                      hasil1 = bil2 % bil1; // modulo
      20
      21
                      cout << hasil1 << endl;</pre>
      22
                      hasil2 = bil3 / bil4;
      23
                      cout << hasil2 << endl;</pre>
      24
                      return 0;
      25
               -}
main.cpp [Soal TP] - Code::Blocks 20.03
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                             v main(): int
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Management x
                       main.cpp X
                                                                                        "D:\Prsktikum Struktur Data\Soal TP\bin\Debug\Soal TP.exe"
Projects Files FSy
                                  #include <iostream>

    ₩orkspace

 Soal TP
                                  using namespace std;
    int main()
       main.cpp
                                      int bil1 = 3, bil2 = 4, hasil1;
float bil3 = 3.8, bil4 = 4.8, hasil2;
hasil1 = bil1 + bil2;
cout << hasil1 <= bil1 - bil2;
hasil1 = bil1 - bil2;</pre>
                            10
11
                                                                                        rocess returned 0 (0x0) execution time : 21.835 s
ress any key to continue.
                                       cout << hasil1 << endl;
hasil1 = bil1 * bil2;
                            12
13
                            14
15
16
17
18
19
20
                                       cout << hasil1 << endl;
                                       hasil1 = bil1 / bil2;
                                       cout << hasil1 << endl;</pre>
                                      cout << has:11 << end1;
has:11 = bil2 / bil1;
/cout << has:11 << end1;
has:11 = bil1 % bil2; //
cout << has:11 << end1;</pre>
                            21
22
23
                                       hasil1 = bil2 % bil1; // modulo
                                       cout << hasil1 << end
hasil1 = bil3 / bil4;</pre>
                                       cout << hasil2 << endl;
                            24
25
                                       return 0;
```

 (Operasi perbandingan) Tuliskan kode berikut dan jalankan. Screenshot kode dan hasilnya, lalu tempelkan pada jawaban.

```
amain.cpp ×
       1
               #include <iostream>
       2
       3
               using namespace std;
       4
       5
               int main(){
                    int bil1 = 2, bil2 = 3, hasil;
       6
                    hasil = bil1 > bil2;
       7
                    cout << hasil << endl;
       8
                    hasil = bil1 >= bil2;
       9
                    cout << hasil << endl;
      10
                    hasil = bil1 < bil2;
      11
      12
                    cout << hasil << endl;
                    hasil = bil1 <= bil2;
      13
      14
                    cout << hasil << endl;
      15
                    hasil = bil1 == bil2;
      16
                    cout << hasil << endl;
      17
                    hasil = bil1 != bil2;
                    cout << hasil << endl;
      18
      19
                    return 0;
             0}
      20
开 main.cpp [Soal TP] - Code::Blocks 20.03
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Management ×
                    main.cpp X
                                                                  III "D:\Prsktikum Struktur Data\Soal TP\bin\Debug\Soal TP.exe"
Projects Files FSy
                              #include <iostream>

    ₩orkspace

Soal TP
                              using namespace std;
   main.cpp
                         6
                                  int bil1 = 2, bil2 = 3, hasil1;
hasil1 = bil1 > bil2;
                                                                  Process returned 0 (0x0) execution time : 0.106 s Press any key to continue.
                         9
                                  cout << hasil1 << endl;</pre>
                         10
                                  hasil1 = bil1 >= bil2;
                         11
                                  cout << hasil1 << endl;</pre>
                        12
                                  hasil1 = bil1 < bil2;
                                  cout << hasil1 << endl;</pre>
                         13
                         14
                                  hasil1 = bil1 <= bil2;
                                  cout << hasil1 << endl;
hasil1 = bil1 == bil2;
                        15
                         16
                                  cout << hasil1 << endl;</pre>
                         18
                                  hasil1 = bil1 != bil2;
                                  cout << hasil1 << endl;</pre>
                         19
                         21
```

 (Operasi logika) Tuliskan kode berikut dan jalankan. Screenshot kode dan hasilnya, lalu tempelkan pada jawaban.

```
1
       #include <iostream>
2
3
       using namespace std;
4
5
       int main(){
6
           int bil1 = 2, bil2 = 3, hasil;
           hasil = bil1 <= bil2 and bil1 < bil2;
7
8
           cout << hasil << endl;
           hasil = bil1 >= bil2 or bil1 < bil2;
9
           cout << hasil << endl;
10
           hasil = not(bil1 >= bil2) or bil1 < bil2;
11
12
           cout << hasil << endl;
13
           return 0;
14
```

```
main.cpp [Soal TP] - Code::Blocks 20.03
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Management ×
                        main.cpp X
                                                                                          ■ "D:\Prsktikum Struktur Data\Soal TP\bin\Debug\Soal TP.exe"
⁴ Projects Files FSy
                                    #include <iostream>

    ₩orkspace

 Soal TP
                                    using namespace std;
   Sources main.cpp
                                    int main()
                                                                                          Process returned 0 (0x0) execution time : 0.077 s
                                         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;</pre>
                             10
11
                             12
13
```

### Penggunaan struktur kontrol

5. (Percabangan if-else) Tuliskan kode berikut dan jalankan. Masukkan input 80, 81, dan 79. Screenshot kode dan hasilnya, lalu tempelkan pada jawaban.

```
amain.cpp ×
 1
        #include <iostream>
 2
 3
        using namespace std:
 4
       int main(){
 5
 6
            int nilai;
 7
            cin >> nilai;
            if (nilai > 80) {
 8
                cout << "A" << endl;
 9
 10
            } else {
                cout << "Bukan A" << endl:
11
12
13
            return 0;
14
       _}}-
15
main.cpp [Soal TP] - Code::Blocks 20.03
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<global>
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                        main():int
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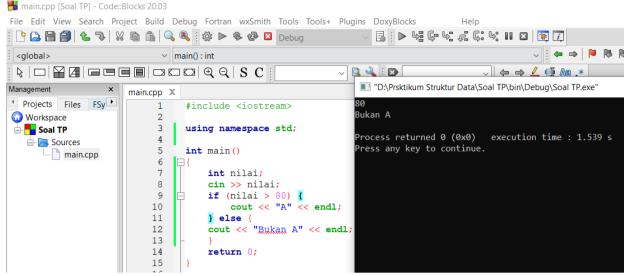
                            #include <iostream>
                                                         "D:\Prsktikum Struktur Data\Soal TP\bin\Debug\Soal TP.exe"

    ₩orkspace

Soal TP
                            using namespace std;
  Sources
                            int main()
     main.cpp
                                                        Process returned 0 (0x0) execution time : 5.142 s
                        6
                           ⊒ {
                                                        Press any key to continue.
                                int nilai;
                        8
                                cin >> nilai;
                                if (nilai > 80) {
                       10
                                   cout << "A" << endl;
                                } else {
                       11
                                cout << "Bukan A" << endl;
                       12
                       13
                                return 0;
                       14
                       15
main.cpp [Soal TP] - Code::Blocks 20.03
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 <global>
                         main():int
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                   main.cpp X
                                                          "D:\Prsktikum Struktur Data\Soal TP\bin\Debug\Soal TP.exe"
⁴ Projects Files FSy ►
                             #include <iostream>

    ₩orkspace

                                                          Bukan A
Soal TP
                        3
                             using namespace std;
                        4
   Process returned 0 (0x0) execution time : 1.589 s
                        5
                             int main()
     main.cpp
                                                          ress any key to continue.
                        6
                        7
                                 int nilai;
                                 cin >> nilai;
if (nilai > 80) {
   cout << "A" << endl;</pre>
                        8
                        9
                       10
                                 } else {
cout << "Bukan A" << endl;</pre>
                       11
                       12
                       13
                       14
                                 return 0;
                       15
```



6. (Perulangan for-to-do) Tuliskan kode berikut dan jalankan. Masukkan 1 dan 10. Screenshot kode dan hasilnya, lalu tempelkan pada jawaban.

```
amain.cpp ×
                #include <iostream>
        1
        2
                using namespace std;
        3
        4
        5
               int main(){
                     int a, b, bilangan;
        6
        7
                     cout << "Masukan batas bawah: ";
                     cin >> a;
        8
        9
                     cout << "Masukan batas atas: ";
       10
                     cin >> b:
       11
                     for (bilangan = a; bilangan <= b; bilangan++) {</pre>
                          cout << "Bilangan " << bilangan << endl;</pre>
       12
       13
                     }
       14
                     return 0;
       15
               }}
<table-of-contents> main.cpp [Soal TP] - Code::Blocks 20.03
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                                                                                 ∨ | ← → <u>/</u> ⊕ Aa .*
Management × main.cpp X
                                                                                ■ "D:\Prsktikum Struktur Data\Soal TP\bin\Debug\Soal TP.exe"
 Projects Files FSy
                              #include <iostream>

    Workspace
    Soal TP

                                                                                lasukan batas atas: 10
                              using namespace std;
                                                                               Bilangan 1
Bilangan 2
Bilangan 3
   main.cpp
                         6
7
                                                                               Bilangan 4
Bilangan 5
                                  int a, b, bilangan;
                                  cout << "Masukan batas bawah: ";</pre>
                                                                               Bilangan 6
                                  cout << "Masukan batas atas: ";
                                                                               Bilangan 7
                        10
                         11
                                                                               Bilangan 8
                                  for (bilangan = a; bilangan <= b; bilangan++)
cout << "Bilangan " << bilangan << endl;
                                                                               Bilangan 9
                        12
13
                                                                               Bilangan 10
                        14
                                                                               Process returned 0 (0x0) execution time : 39.736 s
Press any key to continue.
                        16
```

7.	(Perulangan while-do) Tuliskan kode berikut dan jalankan. Masukkan pada input bilangan 10. Screenshot kode dan hasilnya, lalu tempelkan pada jawaban.

```
amain.cpp ×
               #include <iostream>
       1
       2
       3
               using namespace std;
       4
       5
               int main(){
                    int bilangan, asli, jumlah;
       6
       7
                    cout << "Masukkan bilangan asli: ";
       8
       9
                    cin >> asli;
      10
      11
                    bilangan = 1;
      12
                    jumlah = 0;
                    while (bilangan <= asli) {</pre>
      13
                        if (bilangan % 2 == 0) {
      14
      15
                             jumlah += bilangan;
      16
      17
                         bilangan++;
      18
      19
                    cout << "Jumlah bilangan genap: " <<jumlah << endl;</pre>
      20
                    return 0;
      🕌 main.cpp [Soal TP] - Code::Blocks 20.03
File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help
v main() : int
                                                                                    <global>
 V Q 🔌 🛭 🐼
                                                                              Management ×
                   main.cpp X
                                                                                 "D:\Prsktikum Struktur Data\Soal TP\bin\Debug\Soal TP exe"
Projects Files FSy
                            #include <iostream>
                                                                                Masukan bilangan asli: 10
Jumlah bilangan genap: 30
₩orkspace
                          using namespace std;
                                                                                Process returned 0 (0x0) execution time : 22.149 s
Press any key to continue.
   Sources
                             int main()
     main.cpp
                                int bilangan, asli, jumlah;
                                cout << "Masukan bilangan asli: ";</pre>
                       10
11
                                cin >> asli;
                               bilangan = 1;
jumlah = 0;
while (bilangan <= asli) {
   if (bilangan % 2 == 0) {
      jumlah += bilangan;
   }
                       12
13
14
15
16
                       17
18
19
20
21
                                cout << "Jumlah bilangan genap: " << jumlah << endl;
return 0;</pre>
```

Semoga Selalu diberi kemudahan^^