

LAPORAN PRAKTIKUM

▪ Identitas Praktikum

Nama MK : Struktur Data
Kode MK : CCK2AAB4
Bobot SKS : 4 SKS
Tempat : L-Program, Gedung DC, lantai 3
Hari, tanggal : Selasa, 01 Oktober 2024
Jam : 12:30-15:30 WIB
Topik praktikum : Modul-2 Pengenalan Bahasa C++
(Bagian Kedua)

▪ Identitas Mahasiswa

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Program Studi : S-1 Software Engineering

▪ Hasil Praktikum

2.1 Array

2.1.1 1 Dimensi

```
1  int nilaiMahasiswa[3] = {80, 90, 100};  
2  
3      cout << "Nilai mahasiswa index 0: " << nilaiMahasiswa[0] << endl;  
4      cout << "Nilai mahasiswa index 1: " << nilaiMahasiswa[1] << endl;  
5      cout << "Nilai mahasiswa index 2: " << nilaiMahasiswa[2] << endl;
```

```
● Afadfath | Afadfath  
# & 'c:\Users\Afadfath\.vscode\e  
1' '--stdout=Microsoft-MIEngine-0u  
t64\bin\gdb.exe' '--interpreter=mi  
Nilai mahasiswa index 0: 80  
Nilai mahasiswa index 1: 90  
Nilai mahasiswa index 2: 100  
○ Afadfath | Afadfath  
#
```

2.1.2 2 Dimensi

```
1  int nilai[2][2] = {
2      {100, 220},
3      {380, 440}
4  };
5
6  cout << endl;
7  cout << nilai[0][0] << " " << nilai[0][1] << endl;
8  cout << nilai[1][0] << " " << nilai[1][1] << endl;
9  cout << endl;
```

```
● Afadfath | Afadfath
# & 'c:\Users\Afadfath\.vscode\bin\gdb.exe' '--interpret
k' '--stdout=Microsoft-MIEngine\bin\gdb.exe' '--interpret

100 220
380 440

○ Afadfath | Afadfath
#
```

2.1.3 Banyak Dimensi

```
1  int nilai[3][2][2] = {
2      {
3          {100, 200},
4          {300, 400}
5      },
6      {
7          {500, 600},
8          {700, 800}
9      },
10     {
11         {900, 1000},
12         {1100, 1200}
13     }
14 };
15
16
17 cout << endl;
18 cout << nilai[0][0][0] << " " << nilai[0][0][1] << " " << nilai[0][0][2] << endl;
19 cout << nilai[0][1][0] << " " << nilai[0][1][1] << " " << nilai[0][1][2] << endl;
20 cout << nilai[0][2][0] << " " << nilai[0][2][1] << " " << nilai[0][2][2] << endl;
21 cout << endl;
22 return 0;
```

```
● Afadfath | Afadfath
# & 'c:\Users\Afadfath\.vscode\bin\gdb.exe' '--interpret
4' '--stdout=Microsoft-MIEngine\bin\gdb.exe' '--interpret

100 200 300
300 400 500
500 600 700

○ Afadfath | Afadfath
#
```

2.2 Pointer

```
1  int a = 10;
2  int *b = &a;
3
4  cout << "Nilai a      : " << a << endl;
5  cout << "Alamat a    : " << &a << endl;
6  cout << "Nilai b      : " << *b << endl;
7  cout << "Alamat b    : " << b << endl;
```

```
● Afadfath | Afadfath
# & 'c:\Users\Afadfath\.vs
n' '--stdout=Microsoft-MIEn
t64\bin\gdb.exe' '--interpre
Nilai a      : 10
Alamat a     : 0x5ffec4
Nilai b      : 10
Alamat b     : 0x5ffec4
○ Afadfath | Afadfath
#
```

2.3 Fungsi

Fungsi adalah serangkaian program template tertentu yang mengembalikan nilai tertentu.

```
1  int Subtract(int a, int b){
2      return a - b;
3  }
4
5  int main()
6  {
7      cout << "Input 2 number: ";
8      int a, b;
9      cin >> a >> b;
10
11     cout << "Result: " << Subtract(a, b) << endl;
12     return 0;
13 }
```

```
● Afadfath | Afadfath
# & 'c:\Users\Afadfath\.vs
p' '--stdout=Microsoft-MIEng
t64\bin\gdb.exe' '--interpre
Input 2 number: 1
2
Result: -1
○ Afadfath | Afadfath
#
```

2.4 Prosedur

Sama seperti fungsi tapi tidak mengembalikan nilai apapun

```
1 void Subtract(int a, int b){
2     cout << "Subtract: " << a - b << endl;
3 }
4
5 int main()
6 {
7     cout << "Input 2 number: ";
8     int a, b;
9     cin >> a >> b;
10
11     Subtract(a, b);
12     return 0;
13 }
```

```
● Afadfath | Afadfath
# & 'c:\Users\Afadfath\.vscode\bin\gdb.exe' '--interpret
q' '--stdout=Microsoft-MIEngine
t64\bin\gdb.exe' '--interpret
Input 2 number: 2
3
Subtract: -1
○ Afadfath | Afadfath
#
```

2.5 Parameter Fungsi

Adalah variable yang harus ada sebelum fungsi dapat berjalan.

Pada kode di bawah yang di tandai warna merah adalah parameter

```
1 void Subtract(int a, int b){
2     cout << "Subtract: " << a - b << endl;
3 }
4
5 int main()
6 {
7     cout << "Input 2 number: ";
8     int a, b;
9     cin >> a >> b;
10
11     Subtract(a, b);
12     return 0;
13 }
```