

**LAPORAN PRAKTIKUM
PEMROGRAMAN PERANGKAT BERGERAK**

**MODUL III
PENGENALAN DART**



**Disusun Oleh :
Mohammad Dhimas Afrizal / 2211104023
SE0601**

**Asisten Praktikum :
Muhammad Faza Zulian Gesit Al Barru
Aisyah Hasna Aulia**

**Dosen Pengampu :
Yudha Islami Sulistya, S.Kom., M.Cs.**

**PROGRAM STUDI S1 SOFTWARE ENGINEERING
FAKULTAS INFORMATIKA
TELKOM UNIVERSITY PURWOKERTO
2024**

GUIDED

1. Variabel

Source code :


```
1 // Variabel dengan var
2 void main() {
3     // Menggunakan var
4     var name = "Alice"; // Tipe data String
5     var age = 25; // Tipe data Integer
6     print("Nama: $name, Usia: $age");
7
8     // Type Annotation
9     String name2 = "Bob"; // Tipe data String
10    int age2 = 30; // Tipe data Integer
11    print("Nama: $name2, Usia: $age2");
12
13    // Multiple Variable
14    String firstName, lastName; // Tipe data String
15    firstName = "Charlie";
16    lastName = "Brown";
17    print("Nama Lengkap: $firstName $lastName");
18 }
```

Output :

```
→ PPB_Mohammad-Dhimas-Afrizal_2211104023_S1SE-06-01 git:(main
● ) x dart 03_Pengenalan_Dart/GUIDED/variable.dart
Nama: Alice, Usia: 25
Nama Lengkap: Charlie Brown
Nama: Bob, Usia: 30
```

2. Statement

Source code :



```
1  // IF-ELSE Statement
2  void main() {
3      var openHours = 8;
4      var closedHours = 21;
5      var now = 22;
6      if (now > openHours && now < closedHours) {
7          print("Hello, we're open");
8      } else {
9          print("Sorry, we've closed");
10     }
11
12     // Switch-Case Statement
13     var day = 5; // Misalkan 1 = Senin, 2 = Selasa, dst.
14     switch (day) {
15         case 1:
16             print("Senin");
17             break;
18         case 2:
19             print("Selasa");
20             break;
21         case 3:
22             print("Rabu");
23             break;
24         case 4:
25             print("Kamis");
26             break;
27         case 5:
28             print("Jumat");
29             break;
30         case 6:
31             print("Sabtu");
32             break;
33         case 7:
34             print("Minggu");
35             break;
36         default:
37             print("Hari tidak valid");
38     }
39 }
```

Output :

```
→ PPB_Mohammad-Dhimas-Afrizal_2211104023_S1SE-06-01 git:(main
● ) x dart 03_Pengenalan_Dart/GUIDED/statement_control.dart
Hello, we're open
```

3. Looping

Source code :

```
● ● ●

1 // For Loops
2 void main() {
3 // For Loop sederhana
4 for (int i = 1; i <= 5; i++) {
5 print(i);
6 }
7
8 // While Loops
9 int i = 1; // Deklarasi variabel
10 // While loop sederhana
11 while (i <= 5) {
12 print(i);
13 i++; // Tambahkan 1 ke i setelah setiap iterasi
14 }
15 }
```

Output :

```
→ PPB_Mohammad-Dhimas-Afrizal_2211104023_S1SE-06-01 git:(main
● ) x dart 03_Pengenalan_Dart/GUIDED/looping.dart
1
2
3
4
5
```

4. List Source

code :

```
1 // Fixed Length List
2 void main() {
3     // Membuat fixed-length list dengan panjang 3
4     List<int> fixedList =
5         List.filled(3, 0); // List dengan 3 elemen, diisi dengan 0
6
7     // Mengubah elemen dalam list
8     fixedList[0] = 10;
9     fixedList[1] = 20;
10    fixedList[2] = 30;
11    print(fixedList); // Output: [10, 20, 30]
12
13    // fixedList.add(40); //
14
15    // Growable List
16    // Membuat growable list (panjangnya bisa berubah)
17    List<int> growableList = [];
18    // Menambahkan elemen ke dalam list
19    growableList.add(10);
20    growableList.add(20);
21    growableList.add(30);
22    print(growableList); // Output: [10, 20, 30]
23    // Menambahkan lebih banyak elemen
24    growableList.add(40);
25    growableList.add(50);
26    print(growableList); // Output: [10, 20, 30, 40, 50]
27    // Menghapus elemen dari list
28    growableList.remove(20);
29    print(growableList); // Output: [10, 30, 40, 50]
30 }
31
```

Output :

```
→ PPB_Mohammad-Dhimas-Afrizal_2211104023_SISE-06-01 git:(main
● ) x dart 03_Pengenalan_Dart/GUIDED/list.dart
[10, 20, 30]
[10, 20, 30]
[10, 20, 30, 40, 50]
[10, 30, 40, 50]
```

5. Fungsi

Source code :

```
1 // Mendefinisikan Fungsi
2 int factorial(int n) {
3     if (n <= 1) return 1;
4     return n * factorial(n - 1);
5 }
6
7 // Memanggil Fungsi
8 void main() {
9     print(factorial(6)); // Output: 720
10
11     // Memanggil sapaan
12     String pesan = sapaan("Dart");
13     print(pesan); // Output: Halo, Dart!
14
15     // Memanggil greet
16     greet('Alice', 25); // Output: Hello Alice, you are 25 years old.
17 }
18
19 // Mengembalikan Nilai
20 String sapaan(String nama) {
21     return "Halo, $nama!";
22 }
23
24 // Menambahkan Parameter
25 void greet(String name, int age) {
26     print('Hello $name, you are $age years old.');
```

Output :

```
→ PPB_Mohammad-Dhimas-Afrizal_2211104023_S1SE-06-01 git:(main
● ) x dart 03_Pengenalan_Dart/GUIDED/fungsi.dart
720
Halo, Dart!
Hello Alice, you are 25 years old.
```

UNGUIDED

Sudah ada dalam file Unguided screenshot beserta running programnya