

**LAPORAN TUGAS GUIDED
PEMROGRAMAN PERANGKAT BERGERAK**

**MODUL 3
PENGENALAN DART**



Disusun Oleh :

Aji Prasetyo Nugroho / 2211104049

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Asisten Praktikum :

Muhammad Faza Zulian Gesit Al Barru

Aisyah Hasna Aulia

Dosen Pengampu :

Yudha Islami Sulistya

PROGRAM STUDI S1 REKAYASA PERANGKAT LUNAK

FAKULTAS INFORMATIKA

TELKOM UNIVERSITY PURWOKERTO

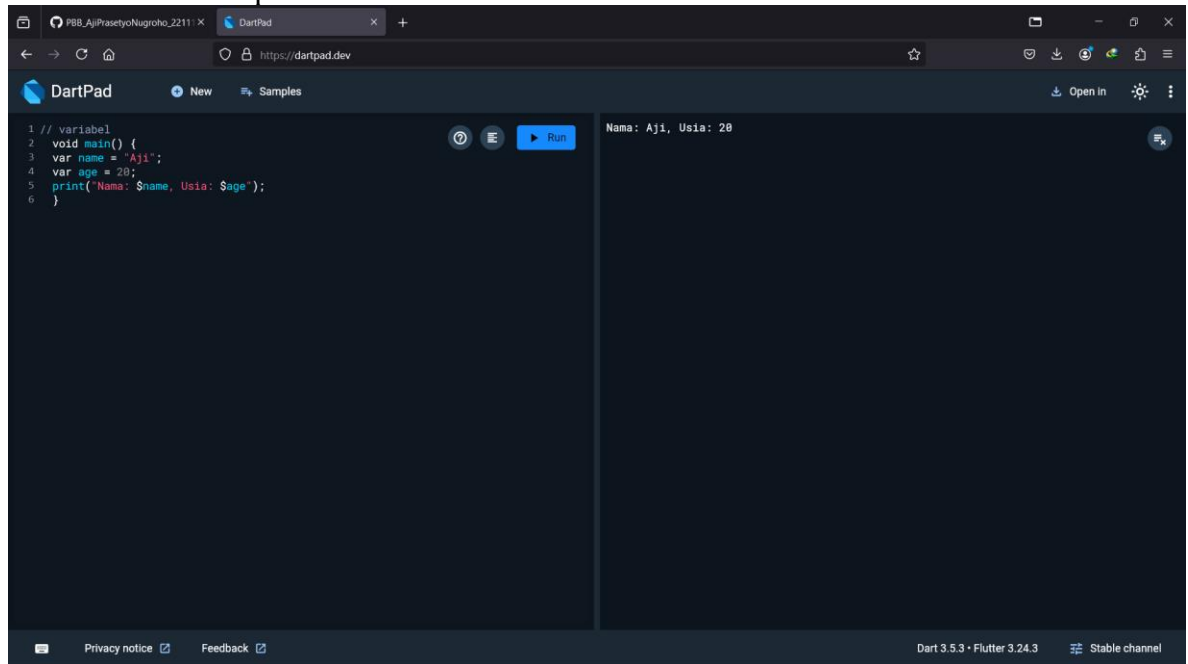
2024

GUIDED

A. Variable

Variabel dalam Dart digunakan untuk menyimpan nilai, baik berupa angka, teks, maupun objek lainnya, yang dapat digunakan dan diubah dalam program.

Source code & Output :



The screenshot shows the DartPad web interface. The code editor on the left contains the following Dart code:

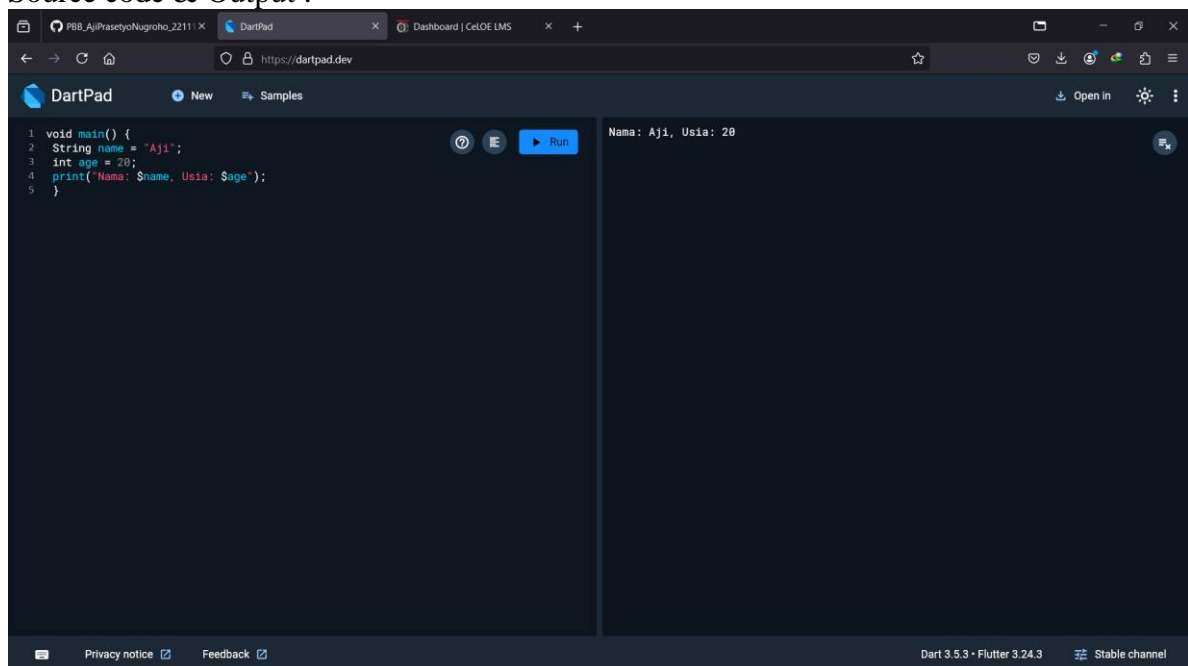
```
1 // variabel
2 void main() {
3   var name = "Aji";
4   var age = 20;
5   print("Nama: $name, Usia: $age");
6 }
```

The output console on the right displays the result of the print statement:

```
Nama: Aji, Usia: 20
```

The bottom status bar indicates the environment: Dart 3.5.3 • Flutter 3.24.3 • Stable channel.

Source code & Output :



The screenshot shows the DartPad web interface. The code editor on the left contains the following Dart code:

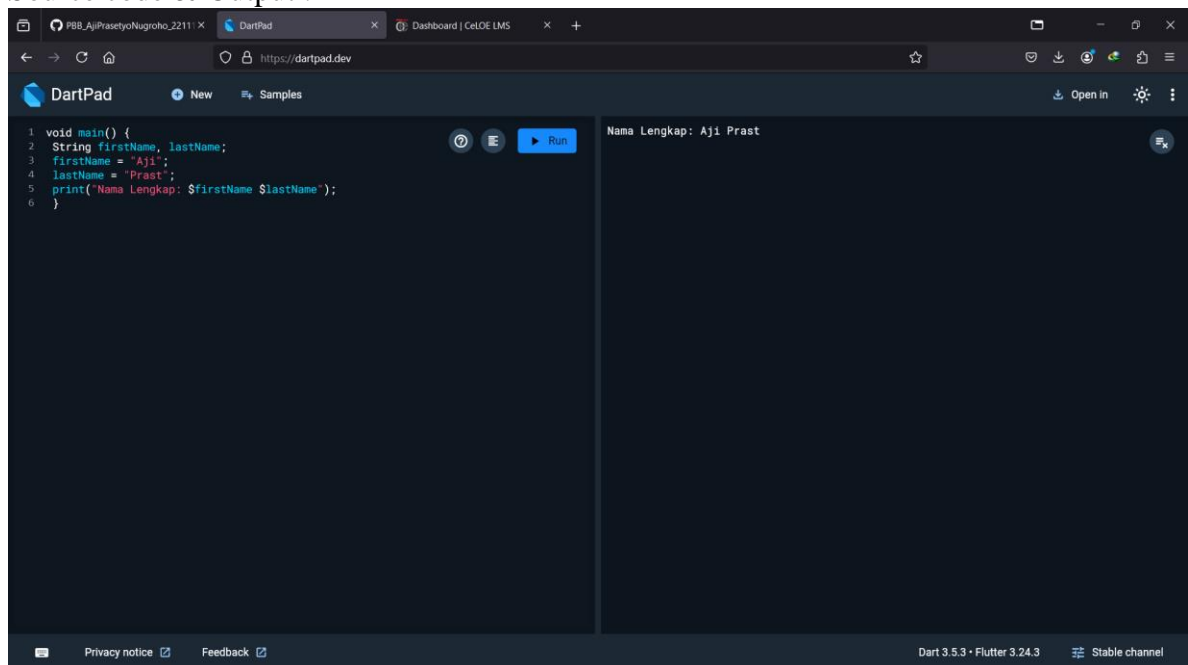
```
1 void main() {
2   String name = "Aji";
3   int age = 20;
4   print("Nama: $name, Usia: $age");
5 }
```

The output console on the right displays the result of the print statement:

```
Nama: Aji, Usia: 20
```

The bottom status bar indicates the environment: Dart 3.5.3 • Flutter 3.24.3 • Stable channel.

Source code & Output :



The screenshot shows the DartPad web interface. The left pane contains the following Dart code:

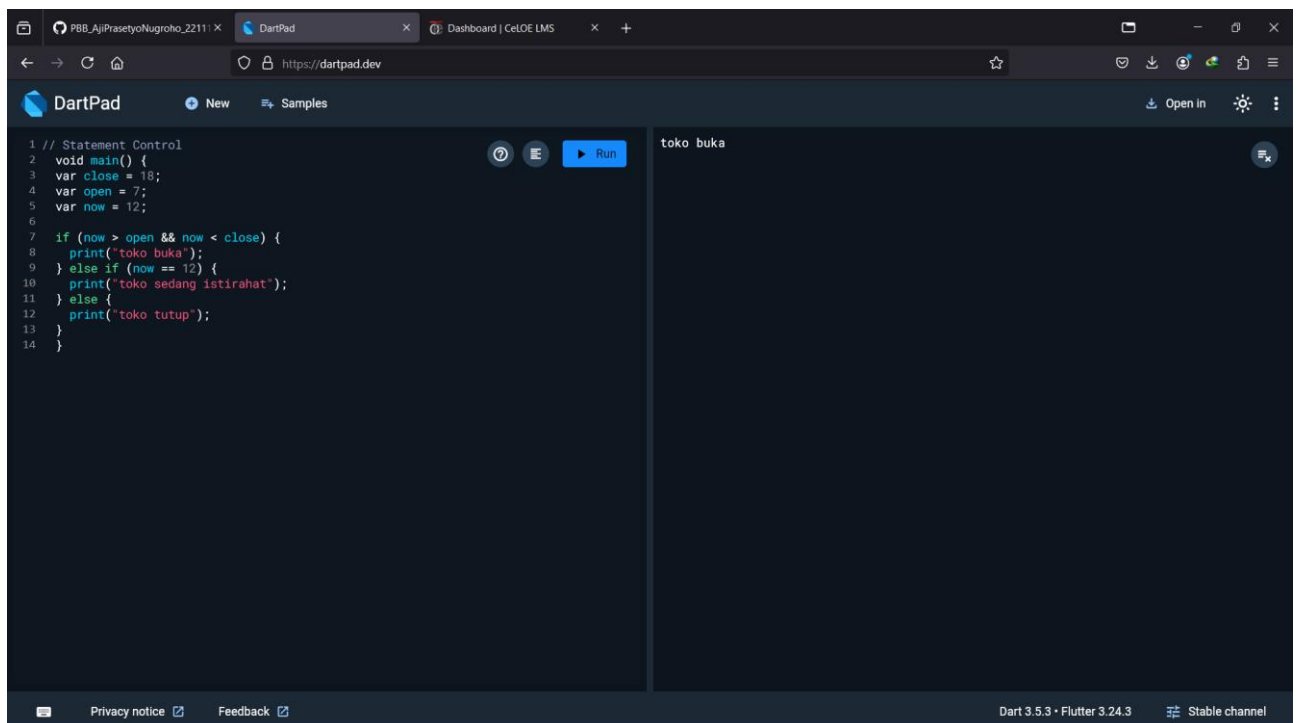
```
1 void main() {  
2   String firstName, lastName;  
3   firstName = "Aji";  
4   lastName = "Prast";  
5   print("Nama Lengkap: $firstName $lastName");  
6 }
```

The right pane displays the output: "Nama Lengkap: Aji Prast". The status bar at the bottom indicates "Dart 3.5.3 • Flutter 3.24.3" and "Stable channel".

B. Statement Control

Statement control atau kontrol alur adalah struktur yang digunakan untuk mengendalikan alur eksekusi program berdasarkan kondisi tertentu.

Source code & Output:

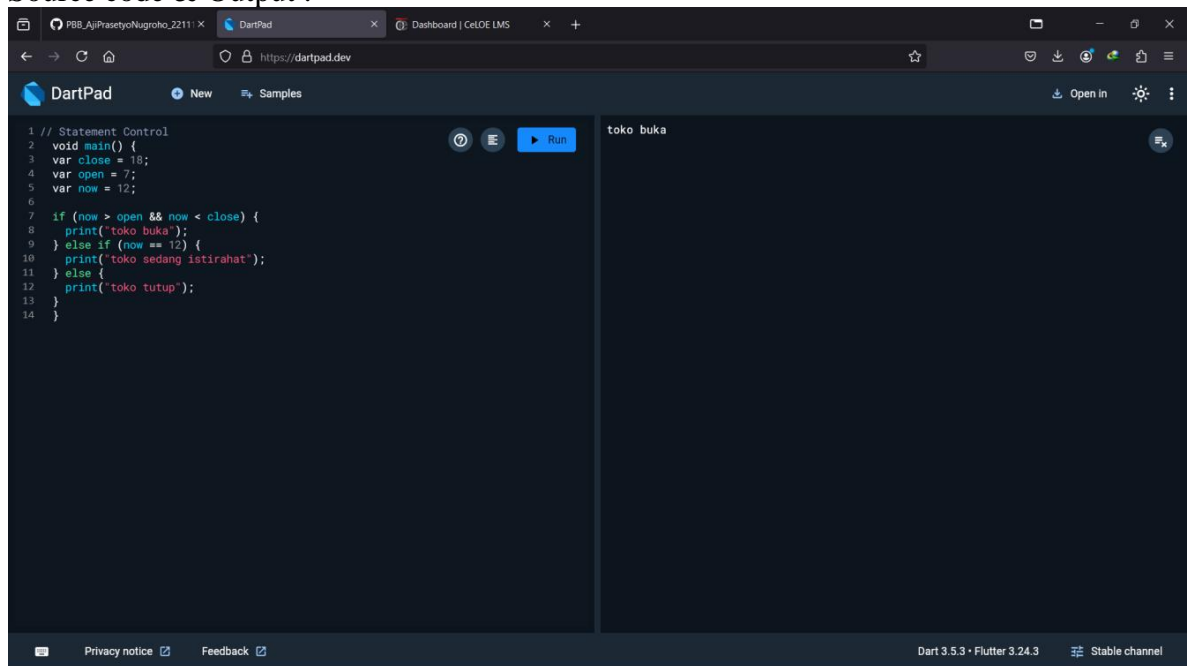


The screenshot shows the DartPad web interface. The left pane contains the following Dart code:

```
1 // Statement Control  
2 void main() {  
3   var close = 18;  
4   var open = 7;  
5   var now = 12;  
6  
7   if (now > open && now < close) {  
8     print("toko buka");  
9   } else if (now == 12) {  
10    print("toko sedang istirahat");  
11  } else {  
12    print("toko tutup");  
13  }  
14 }
```

The right pane displays the output: "toko buka". The status bar at the bottom indicates "Dart 3.5.3 • Flutter 3.24.3" and "Stable channel".

Source code & Output :



The screenshot shows the DartPad web interface. The code editor on the left contains the following Dart code:

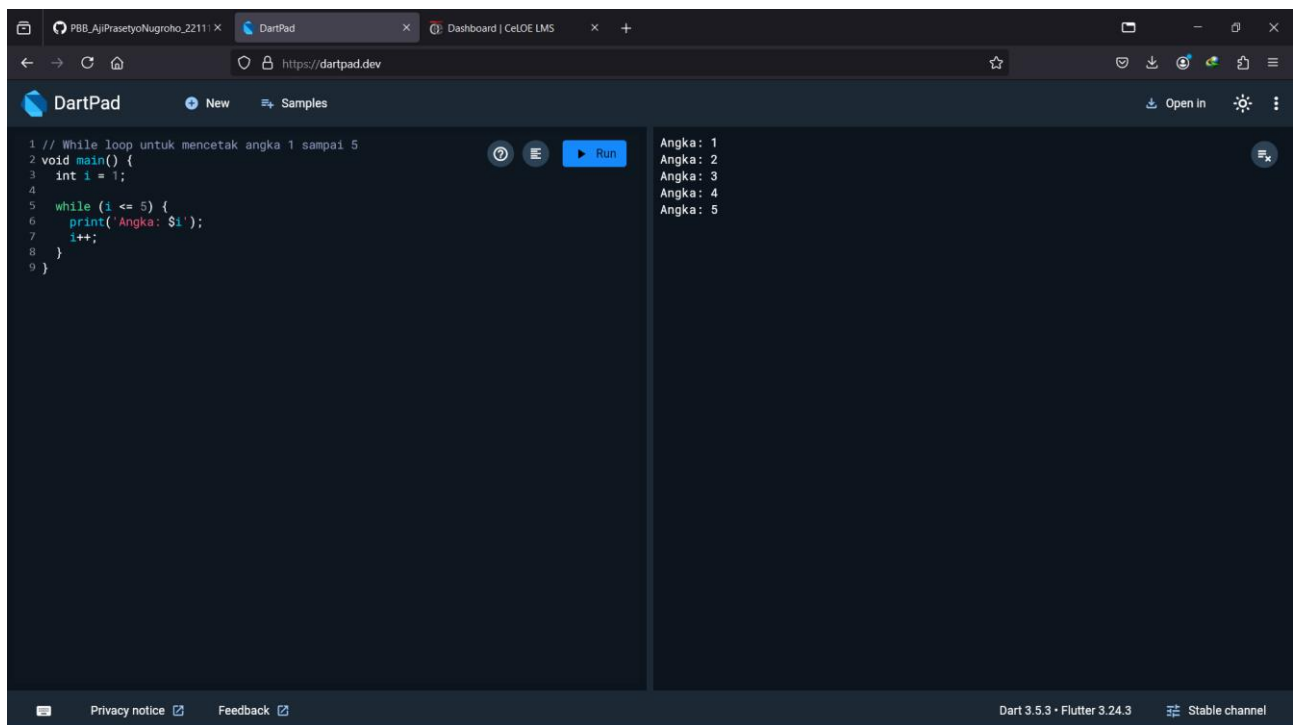
```
1 // Statement Control
2 void main() {
3   var close = 18;
4   var open = 7;
5   var now = 12;
6
7   if (now > open && now < close) {
8     print("toko buka");
9   } else if (now == 12) {
10    print("toko sedang istirahat");
11  } else {
12    print("toko tutup");
13  }
14 }
```

The output console on the right displays the result of the execution: "toko buka". The interface includes a "Run" button and a status bar at the bottom indicating "Dart 3.5.3 • Flutter 3.24.3" and "Stable channel".

C. Looping

Looping digunakan untuk mengeksekusi blok kode berulang kali sampai kondisi tertentu terpenuhi atau berhenti.

Source code & Output :



The screenshot shows the DartPad web interface. The code editor on the left contains the following Dart code:

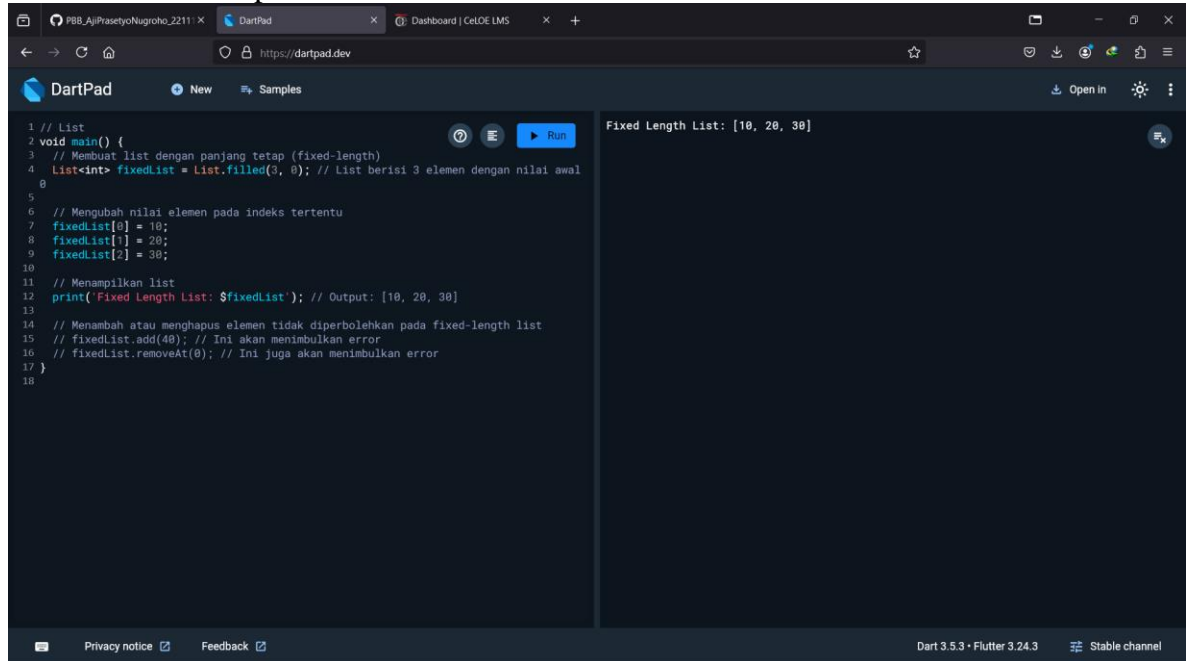
```
1 // While loop untuk mencetak angka 1 sampai 5
2 void main() {
3   int i = 1;
4
5   while (i <= 5) {
6     print('Angka: $i');
7     i++;
8   }
9 }
```

The output console on the right displays the results of the execution: "Angka: 1", "Angka: 2", "Angka: 3", "Angka: 4", and "Angka: 5". The interface includes a "Run" button and a status bar at the bottom indicating "Dart 3.5.3 • Flutter 3.24.3" and "Stable channel".

D. List

List adalah koleksi terurut yang dapat menyimpan elemen-elemen dengan tipe yang sama atau berbeda. List di Dart bisa bersifat dinamis (dapat berubah ukuran) atau fixed-length (panjang tetap).

Source code & Output :



The screenshot shows the DartPad interface with a Dart code editor on the left and a console/output area on the right. The code defines a fixed-length list and attempts to modify it, which results in an error.

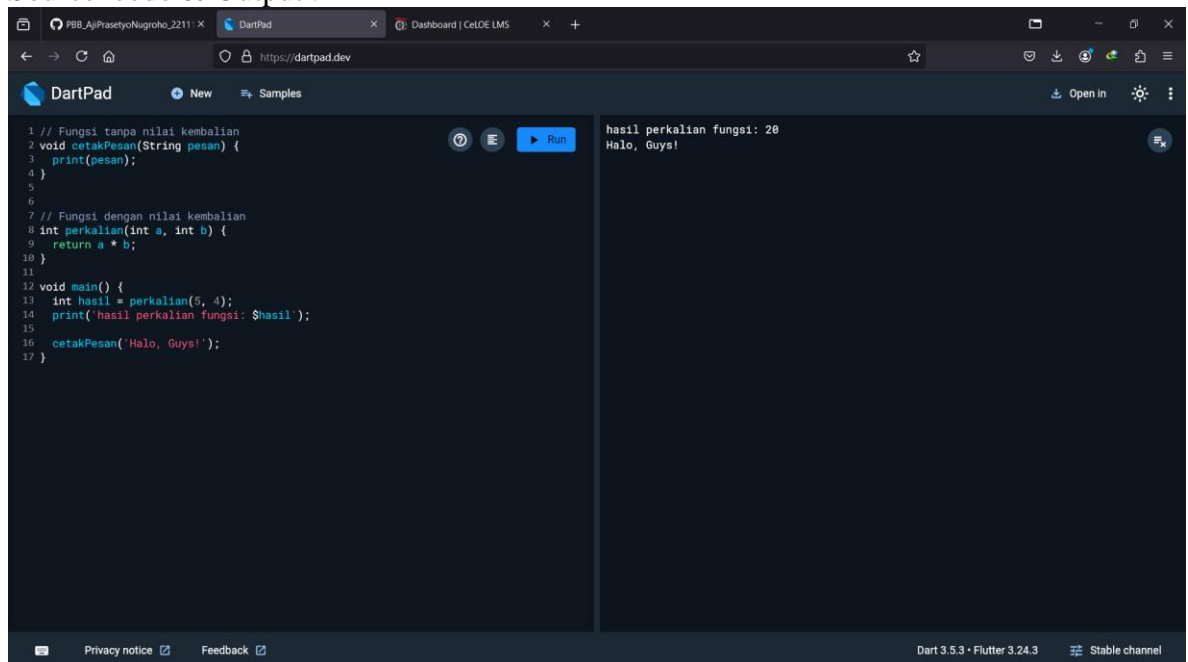
```
1 // List
2 void main() {
3   // Membuat list dengan panjang tetap (fixed-length)
4   List<int> fixedList = List.filled(3, 0); // List berisi 3 elemen dengan nilai awal 0
5
6   // Mengubah nilai elemen pada indeks tertentu
7   fixedList[0] = 10;
8   fixedList[1] = 20;
9   fixedList[2] = 30;
10
11  // Menampilkan list
12  print('Fixed Length List: $fixedList'); // Output: [10, 20, 30]
13
14  // Menambah atau menghapus elemen tidak diperbolehkan pada fixed-length list
15  // fixedList.add(40); // Ini akan menimbulkan error
16  // fixedList.removeAt(0); // Ini juga akan menimbulkan error
17 }
18
```

The output in the console is: Fixed Length List: [10, 20, 30]. The bottom status bar indicates Dart 3.5.3 and Flutter 3.24.3.

E. Fungsi

Fungsi adalah blok kode yang dapat dieksekusi untuk melakukan tugas tertentu. Fungsi membantu untuk memecah kode menjadi bagian-bagian yang lebih kecil dan lebih mudah dikelola.

Source code & Output :



The screenshot shows the DartPad interface with a Dart code editor on the left and a console/output area on the right. The code defines two functions: one for printing a message and another for calculating the product of two numbers.

```
1 // Fungsi tanpa nilai kembalian
2 void cetakPesan(String pesan) {
3   print(pesan);
4 }
5
6
7 // Fungsi dengan nilai kembalian
8 int perkalian(int a, int b) {
9   return a * b;
10 }
11
12 void main() {
13   int hasil = perkalian(5, 4);
14   print('hasil perkalian fungsi: $hasil');
15   cetakPesan('Halo, Guys!');
16 }
17
```

The output in the console is: hasil perkalian fungsi: 20 and Halo, Guys!. The bottom status bar indicates Dart 3.5.3 and Flutter 3.24.3.

