

JOBSHEET 03
PENGANTAR BAHASA PEMROGRAMAN
DART BAGIAN 2



Oleh:

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SIB 3E
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Jawaban Soal Praktikum

1. Dokumentasi Praktikum 1-3

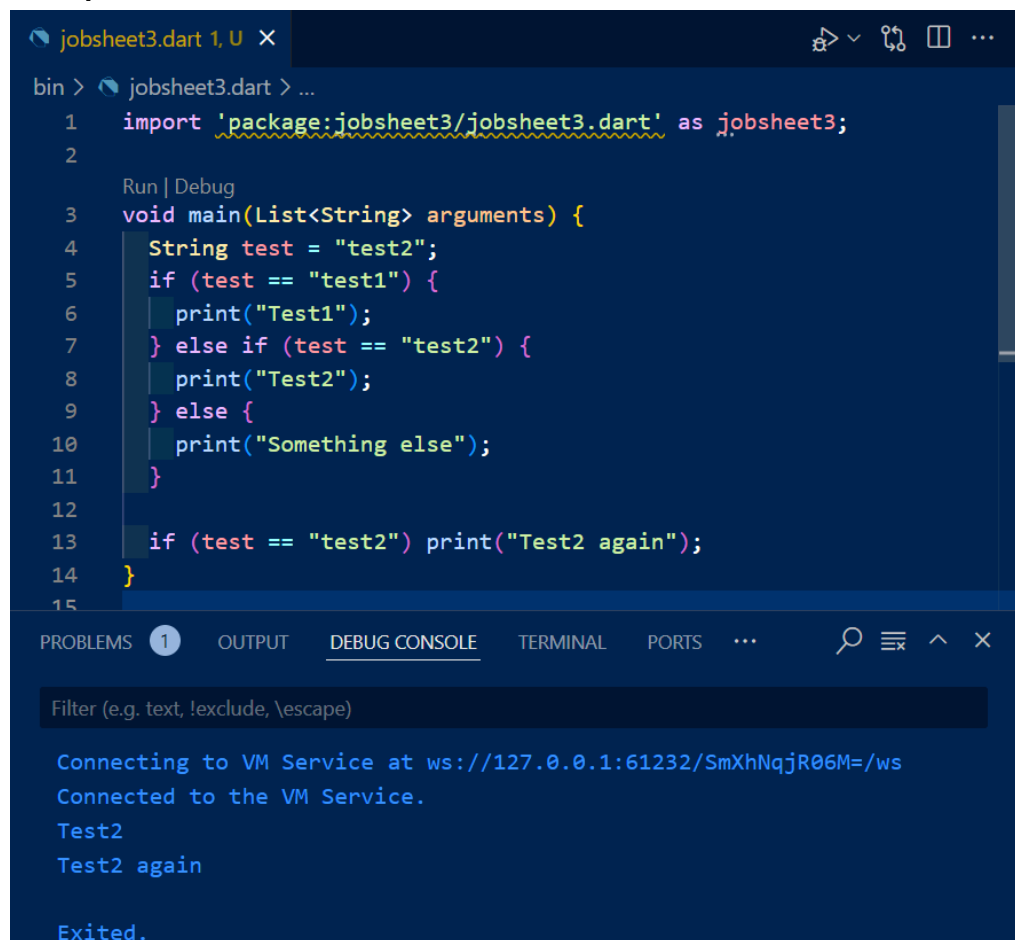
a. Praktikum 1



```
bin > jobsheet3.dart > ...
1  import 'package:jobsheet3/jobsheet3.dart' as jobsheet3;
2
3  Run | Debug
4  void main(List<String> arguments) {
5      String test = "test2";
6      if (test == "test1") {
7          print("Test1");
8      } else If (test == "test2") {
9          print("Test2");
10     } Else {
11         print("Something else");
12     }
13     if (test == "test2") print("Test2 again");
14 }
15
```

Terjadi error karena kesalahan penulisan If dan Else, tidak boleh menggunakan huruf kapital.

Hasil perbaikan kode



```
bin > jobsheet3.dart > ...
1  import 'package:jobsheet3/jobsheet3.dart' as jobsheet3;
2
3  Run | Debug
4  void main(List<String> arguments) {
5      String test = "test2";
6      if (test == "test1") {
7          print("Test1");
8      } else if (test == "test2") {
9          print("Test2");
10     } else {
11         print("Something else");
12     }
13     if (test == "test2") print("Test2 again");
14 }
15
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS ...

Filter (e.g. text, !exclude, \escape)

Connecting to VM Service at ws://127.0.0.1:61232/SmXhNqjR06M=/ws
Connected to the VM Service.
Test2
Test2 again
Exited.

Penambahan kode

```
bin > jobsheet3.dart > main
Run | Debug
3 void main(List<String> arguments) {
4   String test = "test2";
5   if (test == "test1") {
6     print("Test1");
7   } else if (test == "test2") {
8     print("Test2");
9   } else {
10    print("Something else");
11  }
12
13  if (test == "test2") print("Test2 again");
14
15  String test = "true";
16  if (test) {
17    print("Kebenaran");
18  }
19 }
```

Terjadi error karena variabel test dideklarasikan lebih dari sekali, dan parameter kondisi if tidak berisi boolean.

Hasil perbaikan kode

```
test = "true";
if (test == "true") {
  print("Kebenaran");
}
```

b. Praktikum 2

```
bin > praktikum2.dart > main
Run | Debug
1 void main(List<String> args) {
2   while (counter < 33) {
3     print(counter);
4     counter++;
5   }
6 }
```

Terjadi error karena variabel counter belum dideklarasikan.

Hasil perbaikan

```
bin > praktikum2.dart > main
Run | Debug
1 void main(List<String> args) {
2   int counter = 30;
3   while (counter < 33) {
4     print(counter);
5     counter++;
6   }
7 }
8

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS ...
Filter (e.g. text, !exclude, \escape)

Connecting to VM Service at ws://127.0.0.1:61552/WU5Mup7n7pw=/ws
Connected to the VM Service.
30
31
32

Exited.
```

Hasil penambahan kode

```
bin > praktikum2.dart > main
Run | Debug
1 void main(List<String> args) {
2   int counter = 30;
3   while (counter < 33) {
4     print(counter);
5     counter++;
6   }
7
8   do {
9     print(counter);
10    counter++;
11  } while (counter < 77);
12 }
13

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS ...
Filter (e.g. text, !exclude, \escape)

Connecting to VM Service at ws://127.0.0.1:61580/iCh__6WeTUc=/ws
Connected to the VM Service.
30
31
32
33
```

c. Praktikum 3

```
bin > praktikum3.dart > main
Run | Debug
1 void main(List<String> args) {
2   for (Index = 10; index < 27; index) {
3     print(Index);
4   }
5 }
```

Terjadi error karena belum dideklarasikan tipe data variabel index, ketidak konsistenan penamaan variabel index, serta belum adanya penggunaan increment pada kondisi for.

Hasil perbaikan kode

```
bin > praktikum3.dart > main
Run | Debug
1 void main(List<String> args) {
2   for (int index = 10; index < 27; index++) {
3     print(index);
4   }
5 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS ...

Filter (e.g. text, !exclude, \escape)

Connecting to VM Service at ws://127.0.0.1:61651/qHMC0k4DzzA=/ws
Connected to the VM Service.

10
11
12
13
14
15

Hasil penambahan kode

```
bin > praktikum3.dart > main
Run | Debug
1 void main(List<String> args) {
2   for (int index = 10; index < 27; index++) {
3     if (index == 21) break;
4     else if (index > 1 || index < 7) continue;
5     print(index);
6   }
7 }
```

Error seperti sebelumnya, serta terdapat penggunaan kondisi continue yang menyebabkan loop melewati perintah print(index) untuk sebagian besar nilai dari index.

Hasil perbaikan kode

```
bin > praktikum3.dart > main
Run | Debug
1 void main(List<String> args) {
2   for (int index = 10; index < 27; index++) {
3     if (index == 21) break;
4     else if (index > 1 || index < 7) continue;
5     print(index);
6   }
7 }
```

PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL PORTS ...

Filter (e.g. text, !exclude, \escape)

Connecting to VM Service at ws://127.0.0.1:61853/MeCpzQbBEz4=/ws
Connected to the VM Service.

10
11
12
13
14

2. Kode program

```
bin > soal2.dart > ...
Run | Debug
1 void main() {
2   String nama = 'Rega Dane Wijayanta';
3   String nim = '2241760113';
4
5   for (int angka = 2; angka <= 201; angka++) {
6     if (isPrima(angka)) {
7       print('Bilangan prima: $angka, Nama: $nama, NIM: $nim');
8     }
9   }
10 }
11
12 bool isPrima(int angka) {
13   if (angka < 2) return false;
14   for (int i = 2; i <= angka ~/ 2; i++) {
15     if (angka % i == 0) return false;
16   }
17   return true;
18 }
19
```

Output

```
PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL PORTS ...
Filter (e.g. text, !exclude, \escape)

Connecting to VM Service at ws://127.0.0.1:62011/J-eo3BAfIR8=/ws
Connected to the VM Service.
Bilangan prima: 2, Nama: Rega Dane Wijayanta, NIM: 2241760113
Bilangan prima: 3, Nama: Rega Dane Wijayanta, NIM: 2241760113
Bilangan prima: 5, Nama: Rega Dane Wijayanta, NIM: 2241760113
Bilangan prima: 7, Nama: Rega Dane Wijayanta, NIM: 2241760113
Bilangan prima: 11, Nama: Rega Dane Wijayanta, NIM: 2241760113
Bilangan prima: 13, Nama: Rega Dane Wijayanta, NIM: 2241760113
Bilangan prima: 17, Nama: Rega Dane Wijayanta, NIM: 2241760113
Bilangan prima: 19, Nama: Rega Dane Wijayanta, NIM: 2241760113
Bilangan prima: 23, Nama: Rega Dane Wijayanta, NIM: 2241760113
Bilangan prima: 29, Nama: Rega Dane Wijayanta, NIM: 2241760113
```

3. Aplikasi kalkulator IPK

```
D:\KULIAH\SEMESTER 5\PEMROGRAMAN MOBILE\Pemrograman-Mobile\bin\jobsheet2>dart kalkulator.dart
=====
Program Menghitung IPK Mahasiswa
=====
Masukkan jumlah semester: 2
Masukkan jumlah mata kuliah semester 1: 2
Masukkan mata kuliah ke-1: Bahasa Inggris
Masukkan jumlah sks matkul: 4
Masukkan nilai matkul (A/B/C/D/E): B
Masukkan mata kuliah ke-2: Web Dasar
Masukkan jumlah sks matkul: 6
Masukkan nilai matkul (A/B/C/D/E): A
Masukkan jumlah mata kuliah semester 2: 2
Masukkan mata kuliah ke-1: Basis Data
Masukkan jumlah sks matkul: 6
Masukkan nilai matkul (A/B/C/D/E): A
Masukkan mata kuliah ke-2: Web Lanjut
Masukkan jumlah sks matkul: 6
Masukkan nilai matkul (A/B/C/D/E): A
```

```
=====
                        Transkrip Nilai
=====

Hasil Semester 1:

Mata Kuliah      SKS      Nilai
Bahasa Inggris   4        B
Web Dasar        6        A

SKS      : 10
NR       : 3.60
-----

Hasil Semester 2:

Mata Kuliah      SKS      Nilai
Basis Data       6        A
Web Lanjut       6        A

SKS      : 12
NR       : 4.00
-----

Total SKS      : 22
IPK            : 3.80
=====

D:\KULIAH\SEMESTER 5\PEMROGRAMAN MOBILE\Pemrograman-Mobile\bin\iobsheet2>
```