

Nama: Muhamad Fachri Haikal
NIM : 1301202398
Kelas : IF4401
Praktikum ABP MOD 8 Pengenalan Dart

8.1. Pengenalan Dart

8.1.1. Variable

```
void main() {  
  bool isTrue = true;  
  int integer = 1;  
  double decimal = 1.5;  
  String message = "Hello, World!";  
  
  print("Boolean: $isTrue");  
  print("Integer: $integer");  
  print("Double: $decimal");  
  print("String: $message");  
}
```

```
haikal@TUF-hklfach MINGW64 ~/Documents/Kuliah/Semester 6/Aplikasi Berbasis Platform [GGM]/Modul 8 - Pengenalan Dart (master)  
$ dart run mod8_1301202398.dart  
Boolean: true  
Integer: 1  
Double: 1.5  
String: Hello, World!
```

Tipe data primitif yang ada pada dart adalah seperti contoh di atas, yaitu Boolean, integer, double, dan string.

8.1.2. Statement Control

```
void main() {  
  int x = 10;  
  
  print("x = $x");  
  if (x > 5) {  
    print("$x is greater than 5");  
  } else {  
    print("$x is less than or equal to 5");  
  }  
}
```

```
haikal@TUF-hklfach MINGW64 ~/Documents/Kuliah/Semester 6/Aplikasi Berbasis Platform [GGM]/Modul 8 - Pengenalan Dart (master)  
$ dart run mod8_1301202398.dart  
x = 10  
10 is greater than 5
```

Penggunaan statement control if dan else untuk menentukan bilangan lebih besar dari 5 atau sebaliknya.

```
void main() {  
  int x = 5;  
  
  print("x = $x");  
  switch (x) {  
    case 1:  
      print("The value of x is 1");  
      break;  
    case 2:  
      print("The value of x is 2");  
      break;  
    default:  
      print("The value of x is neither 1 nor 2");  
  }  
}
```

Nama: Muhamad Fachri Haikal
NIM : 1301202398
Kelas : IF4401
Praktikum ABP MOD 8 Pengenalan Dart

```
haikal@TUF-hklfach MINGW64 ~/Documents/Kuliah/Semester 6/Aplikasi Berbasis Platform [GGM]/Modul 8 - Pengenalan Dart (master)
$ dart run mod8_1301202398.dart
x = 5
The value of x is neither 1 nor 2
```

Penggunaan statement control menggunakan switch case untuk menentukan apakah suatu bilangan bernilai 1, 2, atau tidak keduanya.

8.1.3. Looping

```
void main() {
  for (int i = 1; i <= 5; i++) {
    print("The value of i is $i");
  }
}
```

```
haikal@TUF-hklfach MINGW64 ~/Documents/Kuliah/Semester 6/Aplikasi Berbasis Platform [GGM]/Modul 8 - Pengenalan Dart (master)
$ dart run mod8_1301202398.dart
The value of i is 1
The value of i is 2
The value of i is 3
The value of i is 4
The value of i is 5
```

Penggunaan looping for untuk mengoutputkan angka 1 sampai 5.

```
void main() {
  int i = 1;

  while (i <= 5) {
    print("The value of i is $i");
    i++;
  }
}
```

```
haikal@TUF-hklfach MINGW64 ~/Documents/Kuliah/Semester 6/Aplikasi Berbasis Platform [GGM]/Modul 8 - Pengenalan Dart (master)
$ dart run mod8_1301202398.dart
The value of i is 1
The value of i is 2
The value of i is 3
The value of i is 4
The value of i is 5
```

Penggunaan loop while untuk mengoutputkan angka 1 sampai 5.

8.1.4. List

```
void main() {
  // Fixed List
  var fixedList = List<int>.filled(3, 0);
  print("Fixed List: $fixedList");

  // Growable List
  var growableList = [1, 2, 3];
  print("Growable List: $growableList");

  // menambahkan item ke dalam growable list
  growableList.add(4);
  print("Growable List after adding item: $growableList");

  // menghapus item dari growable list
  growableList.removeAt(1);
  print("Growable List after removing item: $growableList");
}
```

Nama: Muhamad Fachri Haikal
NIM : 1301202398
Kelas : IF4401
Praktikum ABP MOD 8 Pengenalan Dart

```
haikal@TUF-hklfach MINGW64 ~/Documents/Kuliah/Semester 6/Aplikasi Berbasis Platform [GGM]/Modul 8 - Pengenalan Dart (master)
$ dart run mod8_1301202398.dart
Fixed List: [0, 0, 0]
Growable List: [1, 2, 3]
Growable List after adding item: [1, 2, 3, 4]
Growable List after removing item: [1, 3, 4]
```

Penggunaan list yang size nya tetap dan list yang sizenya dapat bertambah maupun berkurang.

```
void main() {
  // Fixed List
  var fixedList = List<int>.filled(3, 0);
  fixedList.add(1);
  print("Fixed List: $fixedList");
}
```

```
haikal@TUF-hklfach MINGW64 ~/Documents/Kuliah/Semester 6/Aplikasi Berbasis Platform [GGM]/Modul 8 - Pengenalan Dart (master)
$ dart run mod8_1301202398.dart
Unhandled exception:
Unsupported operation: Cannot add to a fixed-length list
#0      FixedLengthListMixin.add (dart:_internal/list.dart:21:5)
#1      main (file:///C:/Users/haikal/Documents/Kuliah/Semester%206/Aplikasi%20Berbasis%20Platform%20%5BGGM%5D/Modul%208%20-%20
Pengenalan%20Dart/mod8_1301202398.dart:58:13)
#2      _delayEntrypointInvocation.<anonymous closure> (dart:isolate-patch/isolate_patch.dart:297:19)
#3      _RawReceivePort._handleMessage (dart:isolate-patch/isolate_patch.dart:192:26)
```

Error di atas didapatkan Ketika menambahkan elemen ke fixedList yang size nya sudah tetap.

8.1.5.Fungsi

```
void main() {
  print(greet("Muhamad Fachri Haikal"));
}

String greet(String name) {
  return "Hello, $name!";
}
```

```
haikal@TUF-hklfach MINGW64 ~/Documents/Kuliah/Semester 6/Aplikasi Berbasis Platform [GGM]/Modul 8 - Pengenalan Dart (master)
$ dart run mod8_1301202398.dart
Hello, Muhamad Fachri Haikal!
```

Contoh fungsi greet untuk menyapa yang menerima parameter bertipe string dan mengembalikan nilai bertipe string.