



# Dart Programming Language

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# Content Outline

- I. Introduction
- II. Variable
- III. List and Mapping
- IV. Control Flow
- V. Function
- VI. Classes
- VII. Object-Oriented Programming
- VIII. Asynchronous
- IX. Practice

## V. Function



In programming, a function is a block of code that performs a specific task or set of tasks. Functions can be thought of as small, self-contained units of code that can be reused throughout a program.



# V. Function



Take parameters, Return values

```
int sum(int a, int b) => a + b;  
void main() {  
    int result = sum(5, 7);  
}
```

No parameters, Return values

```
import 'dart:math';  
int getRandomNumber() {  
    final random = Random();  
    return random.nextInt(10) + 1;  
}  
  
void main() {  
    int randomNum = getRandomNumber();  
}
```

Take parameters, No return values

```
void printMessage(String message) {  
    print(message);  
}  
void main() {  
    printMessage("Hello, world!");  
}
```

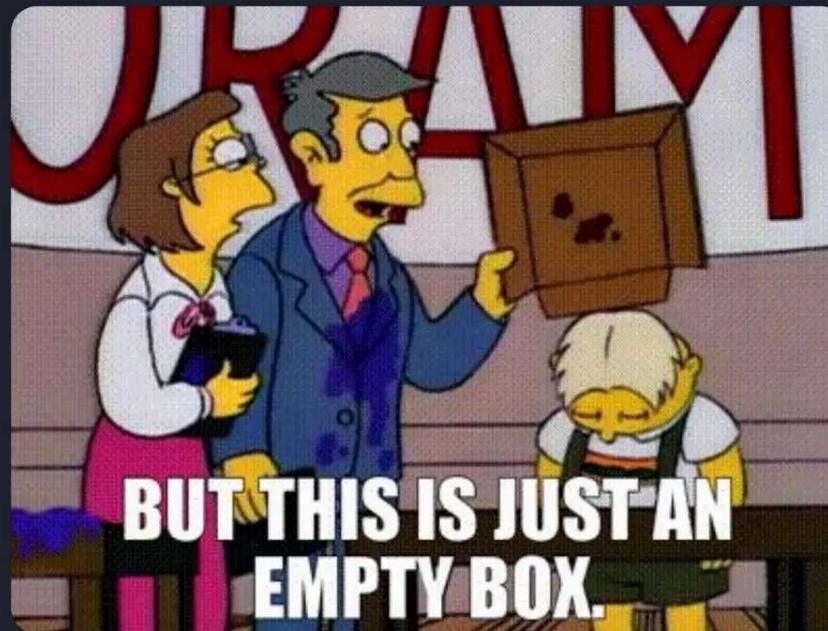
No parameters, No return values

```
void printList(List<int> numbers) {  
    for (final number in numbers) {  
        print(number);  
    }  
}  
  
void main() {  
    final List<int> numbers = [1, 2, 3, 4, 5];  
    printList(numbers);  
}
```

## VI. Nullability - Null Safety 🚫

Null Safety in simple words means a variable cannot contain a ‘null’ value unless you initialized with null to that variable. With null safety, all the runtime null-dereference errors will now be shown in compile time.

```
final String msg1 = null;      Error Null can't be assigned to a variable  
final String? msg2 = null;      No error
```



# VI. Nullability - Null Safety

Bug

```
void crushMessage(String msg) {  
    print("MESSAGE: $msg");  
}  
void main() {  
    final String? name = "Hey, I'm a string!";  
    crushMessage(name); Error Null can't be assigned to a variable  
}
```

Solution

```
void crushMessage(String msg) {  
    print("MESSAGE: $msg");  
}  
void main() {  
    final String? name = "Hey, I'm a string!";  
    crushMessage(name!);  
}
```

THANK YOU