Kotlin for Beginners

1. Introduction to Kotlin

Kotlin is a modern, statically typed programming language that runs on the Java Virtual Machine (JVM). It is designed to be fully interoperable with Java.

2. Basic Syntax

Kotlin syntax is concise and expressive. Here's an example:

```kotlin
fun main() {
    println("Hello, Kotlin!")
}
```

3. Variables and Data Types

You can declare variables using 'val' (immutable) or 'var' (mutable):

```kotlin
val name = "Kotlin"
var age = 5
```

4. Control Flow

Kotlin supports traditional control flow statements like if, when, for, and while.

Example:

```kotlin
val number = 10
if (number > 0) {
    println("Positive")
}
```

5. Functions

Functions in Kotlin are declared using the 'fun' keyword:

```kotlin
fun greet(name: String): String {

    return "Hello, $name!"

}
```

6. Classes and Objects

Kotlin supports object-oriented programming. Example:

```kotlin
class Person(val name: String) {

    fun greet() = "Hi, my name is $name"

}
```

7. Conclusion

Kotlin is an excellent choice for modern Android development and beyond. It's concise, safe, and fully compatible with Java.