## **Basic characteristics**

## Basic Kotlin characteristics are:

- 1. Running on JVM (Java Virtual Machine) meaning that it is cross-platform compatible (Kotlin native is in development phase, but it will be possible to compile Kotlin code as binary for any platform)
- 2. Statically typed, the type of a variable is known at compile time
- 3. Functional:
- First-class functions: You can store functions as a variables or pass as a parameters to other functions as a parameters
- Immutability: It is guaranteed that state of an immutable object can't change over time
- No side effects: Using pure functions that return the same result given the same inputs. Do not modify the state of other objects or interact with the outside world
- 4. Object-Oriented
- 5. Free and Open Source