Code examples

Functions

fun unit(): Unit {

return Unit

}

fun one() = 1

fun triple(x: Int)

Side effects

var global = 0

fun a() = global++

fun b(x: Int) == global++ + x

Immutability

val a = 1

data class Person(val name: String, val age: Int)

val jon = Person("Jon", 28)

val jon2 = jon.copy(age = 29)

Recursion

fun sum(list: List<Int>) : Int {

return when (list.size){

0 -> 0

1 -> list[0]

else -> sum(list.subList(0, list.size / 2)) + sum(list.subList(list.size / 2, list.size))

}

}

sum(listOf(1,2,3,4,5,6,7,8,9))

Fibonachi

Fun fibo(i:Int):Int = when(i) {

0 -> 0

1 -> 1

else -> fibo(i - 1) + fibo(i - 2)

}

Generics

data class Tuple(val a:Any, val b: Any)

fun ints() = Tuple(1,2)

val result = ints()

result.a as Int \* result.b as Int

data class Tuple<T, R>(val a:T, val b:R)

fun ints() = Tuple(1, 2)

val result = ints()

result.a \* result.b