

Kotlin

Const and variable

var a = 6 -> can changing

Val b = 8 -> cannot changing

Data Types

String – Int - Float

Double - Char – Boolean

Ex: var a : Int = 10

Print

Print()

Println()

Read from User

val name = readLine()

Operations

*, / , + , -

+= , -= , *= , /=

++, --

Conditions

If (condition happen) {

Do your program

}

else (condition not happen) {

Do your program

}

when likes switch

when(something) -> optional
{

Case1 -> {

Do your program

}

Case2 {

Do your program

}

else -> default

{

Do your program

}

}

Loops

For (something in 1...9) ->
useful when we know the
limit will be stop

{

Do your program

}

While (something happens)

-> useful when we not know
the limit will be stop

{

Do your program

}

Error handling

try {

Do your program

}

catch (e: Exception)

{

Write error message appear
to user

}

Random number from 0-10

val num=Random.nextInt(11)

Functions

fun sayHi(){

println("Hi")

}

fun add(num1: Int): Int{

return

}

Lists and Arrays

x= listOf("Fluffy", "Snoopy")

pets = arrayOf("Fluffy",
"Snoopy")

ArrayLists

val shoppingList = ArrayList()

shoppingList.add("Eggs")

shoppingList.remove("Milk")

2D ArrayLists

```
x = arrayListOf<ArrayList<String>>()
```

Dictionaries

```
mapOf(1 to "Sara", 2 to "Jim", 3 to "Jane")
```

OOP

```
class Person(val name: String){  
    fun introduction(){  
        println("Hi, my name is $name")  
    }  
}
```

```
abstract class Vehicle{  
    var color = "Blue"  
    abstract fun doors()  
}  
  
class FamilyCar: Vehicle(){  
    override fun doors() {  
        println("This car has 4 doors")  
    }  
}
```

Android Studio

Using the Console

```
Log.d("name of  
page", "print Somthing")
```

Use UI object

```
lateinit var text : TextView  
  
text =  
findViewById(R.id.textVie  
w)
```

Xml

```
android:backgroundTint=  
"#F2F2F2"  
  
android:ems="10"  
  
android:hint="Name"  
  
android:textColor="#F2F2F2"  
  
android:inputType=  
"textPersonName"  
  
android:textColorHint=  
"#F2F2F2"  
  
android:textSize="30dp"  
  
android:textStyle="bold"
```