## **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>>()