

# Applied Statistics for Data Scientists with R

Class 04: Basic Programming Concepts



## **Learning Objective**

- 1. Conditional statements
- 2. Loops
- 3. Functions

#### **Compound Expression**



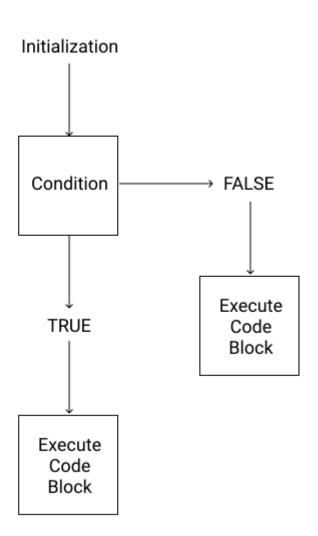
- Simple one line expressions
- Multiple line expressions within curly brackets or separated by semicolon

#### **Conditional Statement: if-else**



#### If-Else Statement

if (condition){
 code block
} else{
 code block
}



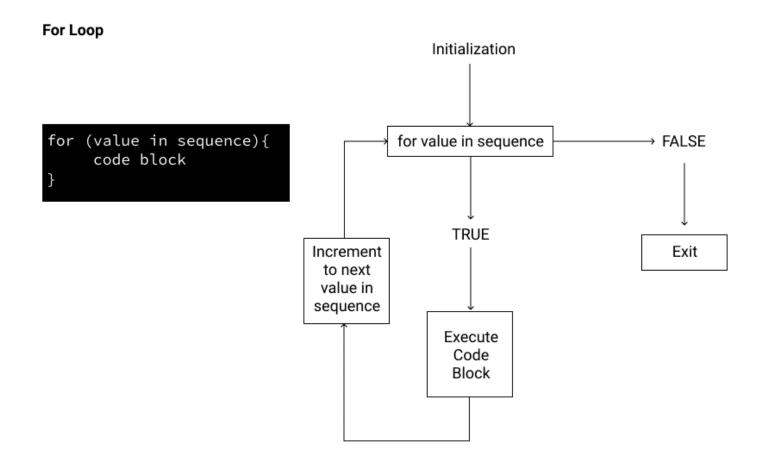
#### **More on Conditional Statement**



- Vectorized ifelse
- switch

#### Loop – For Loop

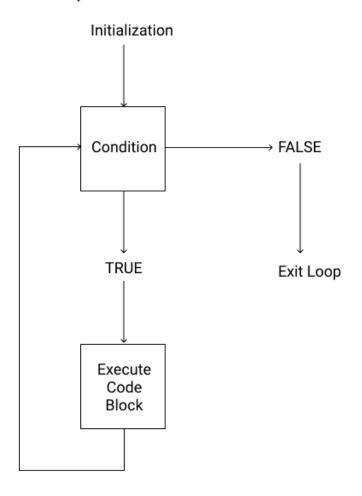




## **Loop - While**



#### While Loop



### **Loop – Apply Family of Functions**



- apply
- tapply
- lapply
- sapply

#### **Function**



