R Decision Making

if , if - else, if - else if - else

if : An if statement consists of a Boolean expression followed by one or more statements.

if else : An if statement can be followed by an optional else statement, which executes when the Boolean expression is false.

```
x <- c("what","is","truth")
if("Truth" %in% x){
  print("Truth is found")
} else {
  print("Truth is not found")
}
```

```
## [1] "Truth is not found"
```

if…else if…else :

An if statement can be followed by an optional else if…else statement, which is very useful to test various conditions using single if…else if statement.

NOTE::

When using if, else if, else statements there are few points to keep in mind. • An if can have zero or one else and it must come after any else if's. • An if can have zero to many else if's and they must come before the else. • Once an else if succeeds, none of the remaining else if's or else's will be tested.

```
x <- c("what","is","truth")
if("Truth" %in% x){
print("Truth is found the first time")
} else if ("truth" %in% x) {
print("truth is found the second time")
} else {
print("No truth found")
}
```

```
## [1] "truth is found the second time"
```

Switch case

A switch statement allows a variable to be tested for equality against a list of values.

Syntax of switch is

switch(expression, case1, case2, case3, …)

```
choice = 2
x <- switch(choice,
"First",
"second",
"third",
"fourth"
)
print(x)
```

```
## [1] "second"
```

```
v = c(1,3)
x <- switch(length(v),
"First",
"second",
"third",
"fourth"
)
print(x)
```

```
## [1] "second"
```