laborato.R

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#MZZ  
#13/05/2022  
#Lab 3  
  
  
# Base de datos -----------------------------------------------------------  
  
  
wins = c(52, 51, 47, 47, 42)  
losses = c(20, 21, 25, 25, 30)  
win\_loss\_perc = wins/(wins + losses)  
win\_loss\_perc

## [1] 0.7222222 0.7083333 0.6527778 0.6527778 0.5833333

teams = c("UtJ", "PhS", "DnN", "LAC", "DIM")  
  
#Primer elemento  
wins [1]

## [1] 52

#Tercer elemento   
losses [3]

## [1] 25

#ultimo nombre   
teams [5]

## [1] "DIM"

length(teams)

## [1] 5

teams[length(teams)]

## [1] "DIM"

sort(wins, decreasing = T)

## [1] 52 51 47 47 42

rev(wins)

## [1] 42 47 47 51 52

# Subconjunto -------------------------------------------------------------  
  
  
wins[teams=="UtJ"]

## [1] 52

teams [wins > 40]

## [1] "UtJ" "PhS" "DnN" "LAC" "DIM"

teams [losses >=10 & losses<= 29]

## [1] "UtJ" "PhS" "DnN" "LAC"

# Factores y variables ---------------------------------------------------  
  
  
num\_vector <- c(1, 2, 3, 1, 2, 3, 2)  
first\_factor <- factor(num\_vector)  
first\_factor

## [1] 1 2 3 1 2 3 2  
## Levels: 1 2 3

teams = factor(teams)  
teams

## [1] UtJ PhS DnN LAC DIM  
## Levels: DIM DnN LAC PhS UtJ

# Secuencias --------------------------------------------------------------  
  
1:5

## [1] 1 2 3 4 5

1:10

## [1] 1 2 3 4 5 6 7 8 9 10

-3:7

## [1] -3 -2 -1 0 1 2 3 4 5 6 7

10:1

## [1] 10 9 8 7 6 5 4 3 2 1

# Vectores repetidos ------------------------------------------------------  
  
  
seq(from= 1, to= 10)

## [1] 1 2 3 4 5 6 7 8 9 10

seq(from= 1, to= 10, by=1)

## [1] 1 2 3 4 5 6 7 8 9 10

seq(from= 1, to= 10, by=2)

## [1] 1 3 5 7 9

seq(from= -5, to= 5, by=1)

## [1] -5 -4 -3 -2 -1 0 1 2 3 4 5

rep(1, times= 5)

## [1] 1 1 1 1 1

rep(c(1,2), times= 3)

## [1] 1 2 1 2 1 2

rep(c(1,2), each= 2)

## [1] 1 1 2 2

rep(c(1,2), length.out= 5)

## [1] 1 2 1 2 1

rep(c(3,2,1),times= 3, each= 2)

## [1] 3 3 2 2 1 1 3 3 2 2 1 1 3 3 2 2 1 1

dat= data.frame(teams= teams, wins=wins, losses=losses, WLperc=win\_loss\_perc)  
  
dat$teams

## [1] UtJ PhS DnN LAC DIM  
## Levels: DIM DnN LAC PhS UtJ

dat$wins[1]

## [1] 52

dat$wins[5]

## [1] 42

dat$wins[dat$teams=="UtJ"]

## [1] 52

dat$teams[dat$losses >=10 & dat$losses <= 29]

## [1] UtJ PhS DnN LAC  
## Levels: DIM DnN LAC PhS UtJ

wins[1]- wins

## [1] 0 1 5 5 10