Lorenz, Pascal, 17-705-187, Group 14, Exercise 1

Pascal Lorenz

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Task 1

#initialize s and z  
z <- 3  
s <- 2:5 #alternative: seq(2,5)  
  
z\*s #multiply each entry of s with z

## [1] 6 9 12 15

s[z] #post z-th entry of s

## [1] 4

Task 2

#read table and save as dat  
dat <- read.table("http://stat.ethz.ch/Teaching/Datasets/milben.dat", header=TRUE)  
  
summary(dat) #view information about the just downloaded table

## n frequency   
## Min. :0.00 Min. : 1.00   
## 1st Qu.:1.75 1st Qu.: 2.75   
## Median :3.50 Median : 9.50   
## Mean :3.50 Mean :18.75   
## 3rd Qu.:5.25 3rd Qu.:22.25   
## Max. :7.00 Max. :70.00

Task 3

dat$n #call entries of 'n', alterative: dat[,1]

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

sum(dat$n) #sum up entries of 'n'

## [1] 28

Task 4

dat$frequency[dat$n>4] #post all entries of 'frequency' whose corresponding entries in 'n' (entries at same position in matrix) are larger than 4

## [1] 3 2 1

Task 5

dat$n[dat$frequency>=9 & dat$frequency<=30] #post all entries of 'n' whose corresponding entries in 'frequency' are in the interval [9,30]

## [1] 2 3 4