Exercise1\_answers.R

2022-12-11

#Exercise 1 Answer Key  
  
#1. Assign the value of 120 to x  
x <- 120  
  
#2. Assign the value of 345 to y  
y <- 345  
  
#3. Create a new variable z with the value y – x  
z <- y-x  
  
#4. Return the value of z to the console  
z

## [1] 225

#5. Create a matrix names “dat1” that has five row and four columns with the following data:  
# 266 369 452 555  
# 245 456 444 576  
# 221 447 489 589  
# 243 299 465 512  
# 285 325 477 499  
  
dat1 <- matrix(c(266, 369, 452, 555,  
 245, 456, 444, 576,  
 221, 447, 489, 589,  
 243, 299, 465, 512,  
 285, 325, 477, 499), #the data elements,one column at a time  
 nrow = 5, #number of rows  
 ncol = 4, #number of columns  
 byrow = TRUE) #fill in the matrix by ROW  
  
#6. Determine the dimensions of the “dat1” matrix using a function.  
dim(dat1)

## [1] 5 4

#7. Return the second row in the “dat1” matrix created in number 5  
dat1[2,]

## [1] 245 456 444 576

#8. Create a data frame names “Lake1” that has six row and two columns with the following data:  
# Species TL  
# LMB 195  
# LMB 210  
# LMB 222  
# LMB 168  
# BLG 95  
# BLG 125  
  
Lake1 <- data.frame (Species = c("LMB", "LMB", "LMB", "LMB", "BLG", "BLG"),  
 TL = c(195, 210, 222, 168, 95, 125))  
  
  
#9. Return the second column (total length column) of the “Lake1” data from two different ways.  
Lake1[,2]

## [1] 195 210 222 168 95 125

Lake1$TL

## [1] 195 210 222 168 95 125

#10. Install the Hmisc package.