DAY4 Exercises - Save the solutions to Day4.R file

Data Frames

1) Create the following data frame.

| | Age | Height | Weight | Sex |
|-------|-----|--------|--------|-----|
| Alex | 25 | 177 | 57 | F |
| Lilly | 31 | 163 | 69 | F |
| Mark | 23 | 190 | 83 | M |

2) Create another data frame with the following data

| | Working |
|-------|---------|
| Alex | Yes |
| Lilly | No |
| Mark | No |

Add this data frame as new column to the previous one.

- a) What class of data is in each column?
- b) Calculate the mean of heights of the people
- c) Obtain the BMI of all and add it as a new column to the data frame.
- d) Add another column which shows whether the person is healthy based on the BMI (greater than 25 = False, else True)

Read Input

- 3) Read data from the file records1.txt to variables r1.
- 4) Read data from the houses.csv file to a variable

Array

5) Create an array having 2X3X3 dimension, populate the numbers from 1 to 20 in the array. Attach row, column and matrix names

Built in Data Frames

- 6) a. From the mtcars data frame, extract the mpg, cyl and hp to prepare a new data frame.
 - b. Combine the first 5 rows and last 5 rows of mtcars to a new data frame

Functions

- 7) Create a function that print the sum of 2 integers, with the following features
 - a. If any parameter is omitted, while calling the function, take the default values as 1
 - b. Provide parameter names as a and b. Call the function by interchanging parameter names.

R Environment

- 8) Write suitable commands for the following
 - a. List the variables in the current R Environment
 - b. Print the current working directory
 - c. Change the current working directory to /home/{your username}
 - d. List the files in the current working directory