### 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