

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

Loops

7. Create a for loop that, given a numeric vector, prints out each number's square and cube values in a single line (use paste function to combine the number and the cube to show in single line)
 - a) Show how to use a while loop to achieve the same result.
 - b) Prepare a loop which prints all the numbers from 1 to 100 except those which are divisible by 13