# Practical Intro-1 

Osama Mahmoud<br>14/11/2019

## Exercise 1:

Data on heights, weights and gender were collected for 10 individuals in early-adulthood. The data were reported in the table below (heights measured in cm , weights in Kg and m refers to a male gender):

| id | ht | wt | gender |
| ---: | ---: | ---: | :--- |
| 1 | 155 | 80 | m |
| 2 | 152 | 85 | m |
| 3 | 164 | 72 | f |
| 4 | 175 | 69 | m |
| 5 | 193 | 86 | f |
| 6 | 203 | 110 | f |
| 7 | 190 | 106 | f |
| 8 | 183 | 96 | m |
| 9 | 155 | 90 | f |
| 10 | 169 | 89 | m |

a) Create vectors for height, weight and gender and assigned them to the names: ht; wt; gender respectively.
b) Using ht and wt vectors, creat a new variable for the BMI (Hint: BMI is calculated by dividing weight measured in Kg by the squared height measured in meters)
c) Show the length of the ht vector.
d) Show a frequency table for the gender variable (Hint: search the help for the table function by typing in ?table)
e) Round the calculated BMI values to 2 decimel digits only.
f) Create a new data.frame with the name DT that includes height, in meters, weight, in Kg, BMI, and gender.
g) Add a logical variable to the DT, with a name of obese whose values are TRUE for subjects with weights over 95 Kg .
h) Find out how many subjects with weights over 95 Kg .
i) Extract the BMI for the 3rd and 5th individuals.

