

Practical Intro-1

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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

- Create vectors for height, weight and gender and assigned them to the names: **ht**; **wt**; **gender** respectively.
- 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**)
- Show the length of the **ht** vector.
- Use R to count how many subjects with weights over 80 Kg.
- Show a frequency table for the **gender** variable (Hint: search the help for the table function by typing in **?table**)
- Round the calculated BMI values to 2 decimel digits only.
- Extract the BMI for the 3rd and 5th individuals.

Exercise 2

- Generate a vector **x** consisting of the values 0.70, 3.26, 4.48, and 5.05.
- Append **x** with a sequence of length 6 of equidistant values starting with 2 and ending with 9. The vector should now consist of 10 values.
- Use **x** to generate three more vectors: (**x1**) represents **x** divided by 4; (**x2**) is **x** multiplied by 2.5; (**x3**) is **x** to the power 2.5.
- Generate a vector **y** consisting of these three vectors, **x1**, **x2** and **x3**. Make sure that **y** has a lenght 30.
- Calculate the maximum, minimum, and mean of **y**.