Input

The input file "data.csv" represents a running track of a runner with each row representing a step made by the runner. The following are the columns:

- "time" (in seconds): it represents the time since the track started; for example, if you have 3 steps with times 1, 2.5, 3.5 , it means that the first step happened after 1 second from the starting time, the second happened after 2.5 seconds from the starting time and the last step happened after 3.5 seconds from the starting time.

- "heartRate": the heart rate of the runner.

- "distance" (in meters): it represents the total distance moved since the start of the track; for example, if we have 2 steps with distances 2 and 3.5, it means that the runner reached a total distance of 2 meters at the first step, then a total distance of 3.5 meters at the second step (which means the second step alone was 1.5 meter).

- "height": height of the runner above ground level.

Requirements

Write a python code in a file called **YOURNAME_main.py** (Julia is preferred if you know julia language and then your code file will be named **YOURNAME_main.jl**)

> *You will deliver this file in the following format:*
> > *## Task[1]*
> > *The code/plot required will be here*
> >
> > *## Task[2]*
> > *The code/plot required will be here*

[Task 1]

- Write a function named "get_frequency" that reads "data.csv" and returns an array of "the steps frequency per minute" (number of steps within a period of 1 minute)

- Call the "get_frequency" function and print the average of the returned values.

[Task 2]

- Use a suitable type of graphs to plot the relation between the height and heart rate (HR) values. Put all necessary information on the graph to be readable (height should be on the x-axis).

- Is there an obvious pattern between height and HR?

Submission

Please send the task with subject "[Task] Data Scientist Intern" to aliaa.rassem@optomatica.com and put jobs@optomatica.com in the CC.