

Tartalomjegyzék

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9th Homework

Program

You have to write a python program which

- reads a `.csv` file
- stores the **NEPTUN**, **MID** and **REP** fields (midterm and repetition results).
 - ◆ use `csv.DictReader` because the order of the columns may be different
- store those students who attended repetition at all
 - ◆ If someone haven't attended a midterm, then the corresponding cell will be empty.
- For these students calculate the growth rate: the increase in performance divided by the original performance:
 - ◆ $(REP-MID)/MID$
 - ◆ if the original midterm was 0 points or haven't attended at all, then the relative growth rate is infinity:


```
float("http://wiki.math.bme.huinf"http://wiki.math.bme.hu)
```
 - ◆ unless the repetition was 0 points too, in that case the growth rate is 0
- The program should read the data from `input.csv` and write the output into `output.csv` in two columns: NEPTUN and GROWTH
 - ◆ the rows should be sorted by NEPTUN code

Hint

See the [lecture notes](#) or this: `extract_points_from_cc.py` in folder [ea_anyag/Info2/](#).

Example

For example if `input.csv` is this:

```
MID,REP,NAME,NEPTUN
0,, "http://wiki.math.bme.hupeople's front of judea"http://wiki.math.bme.hu,GM6MRT
17,, Steve Jobs,NC3J0K
,0,Brian,RQQCFE
19,9,Pontius Pilate,BQ6IAJ
1,,N. Jesus,QDMXVF
18,,Bill Gates,D1CXLO
0,, "http://wiki.math.bme.huknights who say NI"http://wiki.math.bme.hu,CZN5JA
,1, "http://wiki.math.bme.huRobin, the brave"http://wiki.math.bme.hu,BWQ5AU
17,19, "http://wiki.math.bme.huGelehed, the pure"http://wiki.math.bme.hu,BY9B8G
```

The `output.csv` should contain this:

NEPTUN, GROWTH
BQ6IAJ, -0.5263157894736842
BWQ5AU, inf
BY9B8G, 0.11764705882352941
RQQCFE, 0

Handing-in

Deadline: **2018-05-25 23:59**

The perfect solution is 5 points but you can have partial credit too.

Send a single python (.py) file from your **math address** to this address:

- **info1hazi@gmail.com**
- The name of the file should be *EN1_HF9_<user account>.py*. For example for me:
EN1_HF9_borbely.py