

Grades

In two .csv type files, named "first_session.csv" and "second_session.csv", the scores from the two exams of an unspecified course are present. The fields are those reported in the .csv header, which have the same structure; naturally, the people reported change between the two files, since you cannot pass an exam twice. It is also assumed that the files contain correct data (for example, scores between 18 and 31, where 31 is 30 and honors) and that there are at least five students in total between the two files.

The Python program must:

- Produce an output file, also of .csv type (complete with header), named "session.csv," containing the data from both merged files, sorted in ascending order by score, and in case of equal scores, by surname, also in ascending order (in alphabetical order). It is reminded that to sort on two keys, one of the following approaches can be used: 1) use itemgetter twice, first on the secondary key, then on the primary key in sequence 2) use itemgetter only once, specifying both sorting keys separated by a comma.
- After identifying the five people who received the highest score (including both exams of the session), for each of them, calculate the difference between the exam score received and the average of previous exams. Then print to the screen the average of the 5 differences thus calculated, as reported in the example.

Example with the files "first_session.csv" and "second_session.csv":

```
name,surname,score,birth_year,average_of_previous_exams
Paola,La Gala,31,2003,27.67
Giorgio,Vultaggio,26,2002,25.45
Anna,Marovino,18,2004,20.00
Alessia,Albano,24,2001,23.80
Tommaso,Carta,28,2002,28.30
Michele,Lanza,23,2003,23.00
```

```
name,surname,score,birth_year,average_of_previous_exams
Paola,Landini,27,2003,27.50
Irene,Lasorsa,30,2003,29.00
Nicola,Lavagno,23,2002,23.50
Antonio,Ivaldi,27,2004,24.30
Luca,Licitra,21,2003,22.00
Francesca,Leone,31,2003,30.50
```

The resulting "session.csv" file will be:

```
name,surname,score,birth_year,average_of_previous_exams
Anna,Marovino,18,2004,20.00
Luca,Licitra,21,2003,22.00
Michele,Lanza,23,2003,23.00
Nicola,Lavagno,23,2002,23.50
Alessia,Albano,24,2001,23.80
Giorgio,Vultaggio,26,2002,25.45
Antonio,Ivaldi,27,2004,24.30
Paola,Landini,27,2003,27.50
```

And on the console it should be printed:

The average between the differences between the score and previous average for the five students with

result = 0.81