

(https://profile.intra.42.fr)

Remember that the quality of the defenses, hence the quality of the of the school on the labor market depends on you. The remote defenses during the Covid crisis allows more flexibility so you can progress into your curriculum, but also brings more risks of cheat, injustice, laziness, that will harm everyone's skills development. We do count on your maturity and wisdom during these remote defenses for the benefits of the entire community.

SCALE FOR PROJECT PISCINE PYTHON DATA SCIENCE (/PROJECTS/PISCINE-PYTHON-DATA-SCIENCE) / DAY 05 (/PROJECTS/PISCINE-PYTHON-DATA-SCIENCE-DAY-05)

You should evaluate 1 student in this team



Git repository

`git@vogosphere.msk.21-school.ru:vogosphere/intra-uuid-bbf22df`



Introduction

The methodology of School 21 makes sense only if peer-to-peer assessments are done seriously. This document will help you to do it properly.

- Please, stay courteous, polite, respectful and constructive in all communications during this assessment. The bond of trust between community 21 and you depends on it.

- Highlight possible malfunctions of the work done by the person and take the time to discuss and debate it.





- Keep in mind that sometimes there can be differences in interpretation of the tasks and the scope of features. Please, stay open-minded to the vision of the other.

Guidelines

- Evaluate only the files that are on the GIT repository of the student or group.

- Doublecheck that the GIT repository is the one corresponding to the student or the group as long as to the project.
- Meticulously check that nothing malicious has been used to mislead you and have you assess something except the content of the official repository.
- If you have not finished the project yet, it is compulsory to read the entire instruction before starting the review.
- Use the special flags in the scale to report an empty or non-functional solution as long as a case of cheating. In these cases, the assessment is completed and the final grade is 0 (or in a case of cheating is -42). However, except for a case of cheating, you are encouraged to continue reviewing the project to identify the problems that caused the situation in order to avoid them for the next assessment.
- You must stop giving points from the first wrong exercise even if the following exercises are correct.

Attachments

-  subject.pdf (<https://cdn.intra.42.fr/pdf/pdf/25738/en.subject.pdf>)
-  surname.json (/uploads/document/document/4044/surname.json)
-  feed-views.log (/uploads/document/document/4045/feed-views.log)
-  auto.csv (/uploads/document/document/4046/auto.csv)

Preliminaries

Respect the rules

- The repository contains the work of the student (or group).
- The student is able to explain their work at any time during the assessment.
- The general rules and any rules specific to the day are respected throughout the assessment.

 Yes

 No

Piscine Python | Data Science MODULE 05

Any hardcoded result is worth zero for the exercise.

Exercise 00 – Load and save

- Run all the cells in the notebook, they should work without errors

- Run `df.count()`, the result should be exactly like this:

user 1072

dtype: int64

- Run `df2 = pd.read_csv("d05/data/feed-views-semicolon.log", sep=';')`,

it should work without errors

- Run after that `df2.head()`, the result should be like this:

date_time user

0 2020-04-17 12:01:08.463179 artem

1 2020-04-17 12:01:23.743946 artem

2 2020-04-17 12:35:52.735016 artem

3 2020-04-17 12:36:21.401412 oksana

4 2020-04-17 12:36:22.023355 oksana

In all other cases, the test is failed.

✓ Yes

✗ No

Exercise 01 – Basic operations

- Run all the cells in the notebook, they should work without errors

- Run `views.info()`, it should include:

datetime 1076 non-null datetime64[ns]

- The result of `views.count()` must be:

datetime 1076

year 1076

month 1076

day 1076

hour 1076

minute 1076

second 1076

daytime 1076

dtype: int64

- The result of `views.daytime.value_counts()` should be this:

evening 509

afternoon 252

early evening 145

night 129

morning 36

early morning 5

Name: daytime, dtype: int64

- The result of `views.loc[views.daytime == 'night'].hour.idxmax()`

should be 'konstantin'

- The result of `views.loc[views.daytime == 'morning'].hour.idxmin()`

should be 'alexander'

- The result of `views.hour.mode()` should be 22
- The result of `views.daytime.mode()` should be evening
- The value of `iqr` should be 9.0

In all other cases, the test is failed.

✓ Yes

✗ No

Exercise 02 – Preprocessing

- Run all the cells in the notebook, they should work without errors

- Run `df2 = pd.read_json('data/auto.json', orient='records')`,

it should work without errors

- Run `df2 = df2.count()`, the result should be:

CarNumber 725

Refund 725

Fines 725

Make 725

Model 716

dtype: int64

- Run `df2['Fines'].mean()`, the result should be:

8594.586466165412

- Run `df2['Refund'].mean()`, the result should be:

1.5172413793103448

In all other cases, the test is failed.

✓ Yes

✗ No

Exercise 03 – Selects and aggregations

- Run all the cells in the notebook, they should work without errors

- The dimensions of `df.loc[df['Model'].isin(models)]`

is 593 rows × 4 columns? where `models` is the list

containing 'Focus' and 'Corolla'

- Run `df.groupby(['Make', 'Model']).agg('Fines').count()`,

the result should be:

Make Model

Ford Focus 575

Mondeo 6

Skoda Octavia 48

Toyota Camry 16

Corolla 18

Volkswagen Golf 20

Jetta 6

Passat 22

Touareg 5

Name: Fines, dtype: int64

- The top-3 car numbers by the number of fines are:

Y7689C197RUS, 92928M178RUS, 7788KT197RUS?

- The top-1 car number by the sum of fines is X758HY197RUS?

In all other cases, the test is failed.

 Yes

 No

Exercise 04 – Enrichment and transformations

- Run all the cells in the notebook, they should work without errors

- All the floats are displayed with only 2 decimals

- The result of `concat_rows.count()` is

CarNumber 925

Refund 925

Fines 925

Make 925

Model 914

dtype: int64

- The result of `fines.count()` in the code of the student is

CarNumber 925

Refund 925

Fines 925

Make 925

Model 914

Year 925

dtype: int64

- The values of the SURNAME column in the owners do not have unwanted characters ('[', ']', '"')

- Run `len(owners)`, the result should be 531 before deleting 20 samples and adding 3 more

- Run `len(fines)`, the result should be 930 after enriching dataframe

- The result of the first merge should be 900 rows × 7 columns in dimensions

- The result of the second merge should be 933 rows × 7 columns in dimensions

- The result of the third merge should be 930 rows × 7 columns in dimensions

- The result of the fourth merge should be 903 rows × 7 columns in dimensions

- The result of the `pivot_table` has the same structure as it is in the subject, the values can be different

In all other cases, the test is failed.

 Yes

 No

Exercise 05 – Pandas optimizations

- Run all the cells in the notebook, they should work without errors
- The result of `optimized_df.info(memory_usage='deep')`
should be like this:
0 CarNumber 930 non-null category
1 Refund 930 non-null int8
2 Fines 930 non-null float32
3 Make 930 non-null category
4 Model 919 non-null category
5 Year 930 non-null int16
6 strange 930 non-null float32
- Run `df` (the initial one that was cleaned), you should get the error:
NameError: name 'df' is not defined
In all other cases, the test is failed.

☒ Yes☐ No

Ratings

Don't forget to check the flag corresponding to the defense

☒ Ok☐ ★ Outstanding project☐ 📄 Empty work☐ 💬 No author file☐ 🐞 Invalid compilation☐ 📋 Norme☐ 📄 Cheat☐ 💥 Crash☐ 💧 Leaks☐ 🚫 Forbidden function

Conclusion

Leave a comment on this evaluation

Проверка офлайн,
проверил по чек

Finish evaluation

terms & conditions (<https://signin.intra.42.fr/legal>)