

Question from class: eval() function

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To: Fabrizio Iozzi <fabrizio.iozzi@unibocconi.it>

Hello,

Yesterday in class I asked if it was possible to do something similar to f-stings for variable names and you pointed me towards the eval() function.

While that has helped I am still not quite able to do what I want to do.

For my thesis I have 5 .csv files containing information about Airbnb listings, from 2015 to 2019.

I want to analyse the effects on different variables of a host being a superhost.

For this I'm trying to write a script that iterates through those files and makes two lists: one with the data of every superhost on the year it became a superhost and one containing the data of those superhosts on the year before they became a superhost.

To do this I have started with the following

```
for i in range(2019, 2014, -1):
    # create df for each year i in the loop
    data_i = f"D:\Airbnb London Data\Raw Data\london_{i}.csv"
    df = pd.read_csv(data_i, low_memory=False)
    # filter out all NSH of year A, creating variables sh_2019,
    sh_2018 etc
    exec(f'sh_{i} = df[df["host_is_superhost"] == "t"]')
```

This gets the data from each file - named london_2019 through to london_2015 - and creates a variable sh_2019, sh_2018 etc with all the data of the superhosts of that year.

Now I need to compare superhosts of each year and do the following:

- If an id is present in the list of superhosts of an earlier year it needs to be deleted from the later years (so as to keep only the data of the first year being a superhost).
- After finding the first year of being a superhost for a given id I also need to save the year before that one

But I am not sure how to proceed with this, other than manually write the comparisons for each year. I am sure there is some way to tell the loop "You are now looking at year i, search the superhosts of year i and compare them with the superhosts of year i-1"

Do you have any advice for this situation?

Thank you in advance and have a nice day,
Giancarlo Marzola