

## Section B

I have approached this task as if it was a recurring job which needs to be run daily.

=====IMPORTANT!!!=====

In order for the script/queries to be run successfully you would need:

- PostgreSQL database connection;
- To add the connection host, port, user, password in *main.py* =>  
`dwh_creds = {"connectstring": "host= <host> dbname=<dbname> user=<user>  
password=<password>"}`;
- Not to change anything (order, filenames) inside the Section B folder, copy the entire Section B folder to the directory of your choice and run it from there.
- Python 3.8.2, installed module psycopg2, please, see *requirements.txt*. Built-in modules: csv, os, sys, datetime

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The *csv\_inputs* folder contains the original csvs that were sent as part of the assignment, in case you would like to replace those, please, follow the naming conventions:

*BI\_assignment\_account.csv, ...transaction.., ..person..*

### **Simply run *main.py*.**

it's a python script that handles all operations:

- 1) Runs scripts from *sql\_scripts* folder:
  - Creates schema *test\_mb*;
  - Creates tables: *bi\_assessment\_transaction*, *bi\_assessment\_person*, *bi\_assessment\_account*, since every data model needs a dates table, one created as well - *dates\_table*;
- 2) Reads from CSVs from *csv\_inputs* folder;
  - Writes CSV data into tables;
- 3) Alters tables, by adding primary keys and referencing foreign keys;
- 4) Runs the query  
| *that returns transactions for the users 345 and 1234, aggregated monthly, sorted by month, for the period from 15.02.2020 till 06.06.2020.*  
Although, the last transaction is from 2020-05-28.
- 5) Writes the result as a CSV file into the *query\_results* folder.
- 6) Says Voila!

A	B	C
id_person	month	sum_of_transactions
1234	2020-02-01	553.2275
1234	2020-03-01	1223.5368
1234	2020-04-01	802.5819
1234	2020-05-01	400.3059
345	2020-02-01	2644.1412
345	2020-03-01	6663.2372
345	2020-04-01	3242.3866
345	2020-05-01	1712.4352

*Image. Results of the query*

There is a *logger.py* file which creates an errorlog and stores it in *logs* folder.

Also, all steps are written into log file and stored in *logs* folder, in order to see all steps being performed in terminal window just comment out line *sys.stdout = log*

Hope that was clear!