Prerequisite:

- 1. Python IDE of your choice need to be installed
- 2. DB administration tool of your choice that supports MySQL need to be installed

Overview:

The International Space Station (ISS) is an orbital outpost circling high above our heads. We want to know when the ISS is planned to fly over Israel's largest cities, and store this information in a database.

Requirements:

- 1. For <u>each</u> of the cities: Haifa, Tel Aviv, Beer Sheva and Eilat, <u>retrieve 50 upcoming timestamps</u> on which the ISS is planned to fly above that city
- 2. In order to achieve that you'll need to use the following API to get data on the ISS flight path: http://open-notify.org/Open-Notify-API/ISS-Pass-Times/
- 3. City configuration data (latitude and longitude) should be stored in a separate configuration file in json format
- 4. Output dataset should be stored in the "orbital_data_your_name" table on MySQL db (you'll need to create the table). <u>Data should be separated into columns</u> (don't store as json in a single column) and timestamps translated to UTC
- 5. Create stored procedure(add **your_name** to name of procedure) that counts average amount of times ISS flight over each city daily and updates city_stats_**your_name**
- *For example: if during 50 upcoming timestamps you have 5 full days with the following results: 5/ 6/ 7/ 4/ 5, so average will be (5+6+7+4+5) / 5 = 5.4, this calculation needs to be done for every city.
- 6. Add execution of stored procedure to your code
- 8. Query city_stats_your_name and store the result in a csv file.

*connection details need to be stored in separate file - please don't share it via git MySQL DB connection details :

Host: 104.197.7.195

Database: interview

User: interview_user

Port: 3306

Password: zz!!@@202111558843

Example mysql.connector.connect(user='interview_user', password='zz!!@@202111558843', host='104.197.7.195', database='interview')

- 5. Project need to be uploaded to **https://github.com/** (or any other git of your choice) and link attached to reply email
- *latitude and longitude can be any point within the city
- *altitude can be default