Welcome to the interview project as part of the assessment process for Vituity EDI. For the interview project you are expected to demonstrate your Python programming experience and Data Manipulation skills.

Follow the instructions provided closely, you are free to use whatever package management tools, project configurations, and libraries you see fit. However, for the end result it is expected that your solution will meet the instructions required and that the README you have provided will have all of the necessary information required to install the dependencies needed and run your project.

The expected end result of this interview project is that you will have demonstrated your knowledge of Python and Data Manipulation.

You are given 3 files.

- One CSV (Patient data, has both ADT and ORU Messages)
- One ADT file that has one patient.
- One ORU file that has one patient.

Instructions

1.Create a GitHub repository for your interview project, you may name it however you like. If you would prefer to have a private repository, then you will be asked to share access to your repository and/or submit a ZIP file of your code which includes the git repository.

2. Create all of the necessary project configurations needed for your Python project, you are free to set up the project configurations however you feel is the most appropriate and/or using whatever tools you prefer. However, it is expected that you provide instructions in the README for these tools and how to run your code.

3. For the 3 files, using python, Make a copy of the 3 files in a directory **Archive/Original.**

4. Using Python, You will have to create files called **ADT_(TodaysDate)_Modified_file.csv** and **ORU_(TodaysDate)_Modified_file.csv**, the files will be in the directory **Archive/Modified.** If there is another file type, you may follow this pattern. **These will be your output files.**

a. In the csv, there's a column called **message_type,** (ADT/ORU/etc). The ADT message type will be in the ADT csv and the ORU message type will be in the ORU csv as mentioned above.

b. Using the 2 text files (ORU and ADT). Add an extra row for each of the data in there (**Please add at least the following columns into the output file):** Message_type, patient_first_name, patient_last_name, patient_middle_name, patient_address, state, account_number, and bill_amount (with value **of 1234** in the column) (the more you add, the better).

c. Add another Column called **date_of_service**, which adds today's date to the column.

d. Manipulate the column patient_first_name, patient_last_name, patient_middle_name and combine the three columns into one column called **patient_name**, the format for this column will be **"**patient_last_name, patient_first_name patient_middle_name**".**

e. Create a report file in txt, that lists the total bill amount for each state.

f. Create a row at the end of the bill_amount that sums up the total bill.

BONUS - Database Support

The following is a BONUS objective that is not mandatory, but it is recommended to demonstrate your knowledge of databases.

1. Add support and add only the ADT message type data to an SQLite database.

2. You may use any Python library you prefer to support SQL operations and SQLite.

3. Create a database with a schema that mimics the data that is in the final modified CSV for all the ADT messages.