README:

Data Files:

The data files are stored in csv format. Each data file is required for each of the table in the database. The empty database has already been created in the part1 and part2 of the project.

The following are the data files:

1. FEDERAL.csv – This file is used for loading data into the FEDERAL table.
2. VACCINE.csv – This file is used for loading data into the VACCINE table.
3. STATES.csv – This file is used for loading data into the STATES table.
4. LOCAL_BODIES.csv – This file is used for loading data into the LOCAL_BODIES table.
5. PATIENT_1.csv – This file is used for loading data into the PATIENT table.
6. ALLERGY.csv - This file is used for loading data into the ALLERGIES table.
7. MED_Condition.csv - This file is used for loading data into the MED_Condition table.
8. VACCINATION_CAMPS.csv - This file is used for loading data into the VACCINATION_CAMPS table.
9. HEALTH_CARE_CENTERS.csv - This file is used for loading data into the HEALTH_CARE_CENTERS table.
10. LABS_AND_PHARMACIES.csv - This file is used for loading data into the LABS_AND_PHARMACIES table.
11. HAVE.csv - This file is used for loading data into the HAVE table.

Program Files:

There are program files written in python for loading the data into the tables in the database and for having a user interface for the transactions.

The following are the program files:

1. loadData.py – This file loads the records from the data files to the tables in the database in omega server.
   Run command: python loadData.py

2. printData.py – This file prints the records inserted in each of the tables in the database in an easily understandable way.
   Run command: python printData.py
3. insertData.py – This file runs the user interface for the transactions. The user would be requested to enter all the required parameters for the transaction the user selects as per the options given.
   Run command: python insertData.py

For query 5:

This query is performed in Mysql workbench and the query is specified in Final_trigger.txt. This trigger is applied on the PATIENT table which checks 3 attributes: Age, Occupation and Vaccination Phase.

The trigger ensures no invalid insert into the PATIENT table would be successful and would notify with an error message on such an attempt. This is implemented by using if-else statements which checks the values of each of the 3 attributes and they must satisfy a set of conditions to allow the insertion into the PATIENT table. The federal body would be notified if the patient is administered in the wrong vaccination phase. The entry would be notified to be invalid if the occupation is invalid.

References:

https://www.mysqltutorial.org/mysql-triggers/mysql-before-update-trigger