**1. Problem**

Copy the data in the file ‘web-server-access-log.txt.gz’ to the table ‘access\_log’ in the PostgreSQL database ‘template1’.

The file is available at the location : “https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBM-DB0250EN-SkillsNetwork/labs/Bash%20Scripting/ETL%20using%20shell%20scripting/web-server-access-log.txt.gz".

The following are the columns and their data types in the file:

a. timestamp - TIMESTAMP

b. latitude - float

c. longitude - float

d. visitorid - char(37)

and two more columns: accessed\_from\_mobile (boolean) and browser\_code (int)

The columns which we need to copy to the table are the first four columns : timestamp, latitude, longitude and visitorid.

NOTE: The file comes with a header. So, use the ‘HEADER’ option in the ‘COPY’ command.

The problem may be solved by completing the following tasks:

**Task 1: Start the Postgres server.**

**Task 2: Create the table.**

Create a table named access\_log to store the timestamp, latitude, longitude and visitorid.

**Task 3. Create a shell script named cp-access-log.sh and add commands to complete the remaining tasks to extract and copy the data to the database.**

**Task 4. Download the access log file.**

**Task 5. Unzip the gzip file.**

**Task 6. Extract required fields from the file.**

**Task 7. Redirect the extracted output into a file.**

**Task 8. Transform the data into CSV format.**

**Task 9. Load the data into the table access\_log in PostgreSQL**

**Task 10. Execute the final script.**

**Task 11. Verify by querying the database.**