DATABASE PROJECT PART-3

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Screenshots that you successfully can import and use libraries

Checking Python Installation

```
C:\Users\Pratyusha Sanapathi>python
Python 3.6.4 (v3.6.4:d48eceb, Dec 19 2017, 06:04:45) [MSC v.1900 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> _
```

Installing psycopg2

```
C:\Users\Pratyusha Sanapathi>pip install psycopg2 --user
Collecting psycopg2
Using cached psycopg2-2.9.5-cp36-cp36m-win32.whl (999 kB)
Installing collected packages: psycopg2
Successfully installed psycopg2-2.9.5
```

Installing pandas

```
C:\Users\Pratyusha Sanapathi>pip install pandas
Requirement already satisfied: pandas in c:\users\pratyusha sanapathi\appdata\local\programs\python\python36-32\lib\site-packages (1.1.5)
Requirement already satisfied: numpy>=1.15.4 in c:\users\pratyusha sanapathi\appdata\local\programs\python\python36-32\lib\site-packages (from pandas) (1.19.5)
Requirement already satisfied: pytz>=2017.2 in c:\users\pratyusha sanapathi\appdata\local\programs\python\python36-32\lib\site-packages (from pandas) (2017.3)
Requirement already satisfied: pytz>=2017.2 in c:\users\pratyusha sanapathi\appdata\local\programs\python\python36-32\lib\site-packages (from pandas) (2017.3)
Requirement already satisfied: sizo=1.5 in c:\users\pratyusha sanapathi\appdata\local\programs\python\python36-32\lib\site-packages (from pandas) (2.8.2)
Requirement already satisfied: sizo=1.5 in c:\users\pratyusha sanapathi\appdata\local\programs\python\python36-32\lib\site-packages (from pandas) (1.11.0)
```

Screenshots that you successfully established your connection with Postgres

Connecting to Python

```
RESTART: C:/Users/Fratyusha Sanapathi/Desktop/Assignments/D8/movie_data/Fhase-3/connection.py
PostgreSQL server information
('user:': postgrear', 'channel. binding': 'prefer', 'dbname': 'postgrear', 'hoat': 'localhost', 'port': '5432', 'options': '', 'sslmode': 'prefer', 'sslcompression': '0', 'sslsni': '1', 'ssl_
min_protocol_version': 'TLSv1.2', 'gssencmode': 'disable', 'krbsrvname': 'postgres', 'target_session_attrs': 'any')
You are connected to - ('PostgreSQL 15.0, compiled by Visual C++ build 1914, 64-bit',)
```

2 New Questions

1. Write a SQL query to find the movies with year and genres. Return movie title, movie year and generic title.

ANS:

Code:

```
import pandas as pd
import warnings
warnings.filterwarnings('ignore')

f connecting to db
con = paycopg.connect(
    host="localhost",
    database="postgres",
    password="BBroject",
    port="$432"
)

f query execute("$ELECT mov_title, mov_year, gen_title FROM movie NATURAL JOIN movie_genre NATURAL JOIN genre!")
movie_details = pd.DataFrame(columns = ['mov_title','mov_year','gen_title'])
table = cur.fetchall()

for r in table:
    output_table df =('mov_title':r[0],'mov_year':r[1],'gen_title':r[2])
    movie_details = movie_details.append(output_table_df, ignore_index = True)
print(movie_details)

f close the cureor
cur.close()

f close the connection
con.close()
```

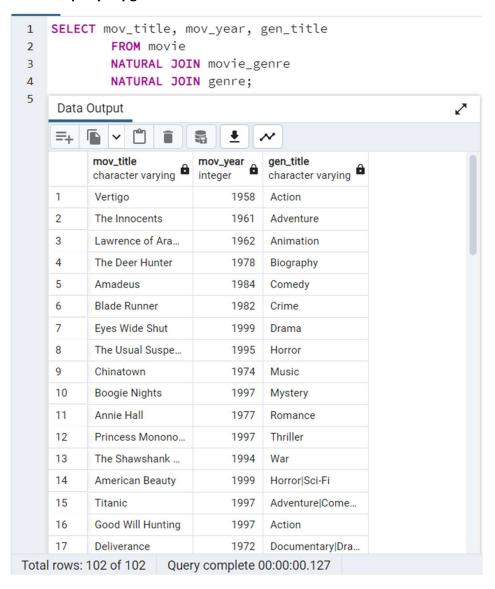
Output using Python:

No. of rows returned =102

Query:

```
SELECT mov_title, mov_year, gen_title
FROM movie
NATURAL JOIN movie_genre
NATURAL JOIN genre;
```

Output of same query in pgAdmin:



2. write a SQL query to find those movies, which were released before 1998 and language is Japanese.

ANS:

Code:

```
import psycopg2
import pandas as pd
import warnings
warnings.filterwarnings('ignore')
con = psycopg2.connect(
   host="localhost",
   database="postgres",
   user="postgres",
   password="DBproject",
   port="5432"
cur = con.cursor()
cur.execute("SELECT mov_id, mov_title FROM movie WHERE mov_year<1998 AND mov_lang = 'Japanese';")</pre>
movie_info= pd.DataFrame(columns = ['mov_id', 'mov_title'])
table = cur.fetchall()
for r in table:
   output_table_df ={'mov_id':r[0],'mov_title': r[1]}
   movie_info = movie_info.append(output_table_df, ignore_index = True)
print (movie_info)
cur.close()
con.close()
```

Output using Python:

No. of rows returned =2

Query:

```
SELECT mov_id, mov_title
FROM movie
WHERE mov_year<1998
AND mov_lang = 'Japanese'
```

Output of same query in pgAdmin:

