

## Project Phase-3

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### Screenshots that you successfully can import and use libraries

#### Installing Python

```
C:\Users\nandi>python
Python 3.10.7 (main, Sep 11 2022, 17:39:25) [GCC 12.2.0 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> _
```

#### Installing psycopg2

```
C:\Users\nandi>pip3 install psycopg2
Collecting psycopg2
  Using cached psycopg2-2.9.5-cp311-cp311-win_amd64.whl (1.2 MB)
Installing collected packages: psycopg2
Successfully installed psycopg2-2.9.5
```

#### Installing pandas

```
C:\Users\nandi>pip3 install pandas
Requirement already satisfied: pandas in c:\users\nandi\appdata\local\programs\python\python311\lib\site-packages (1.5.1)
Requirement already satisfied: python-dateutil>=2.8.1 in c:\users\nandi\appdata\local\programs\python\python311\lib\site-packages (from pandas) (2.8.2)
Requirement already satisfied: pytz>=2020.1 in c:\users\nandi\appdata\local\programs\python\python311\lib\site-packages (from pandas) (2022.6)
Requirement already satisfied: numpy>=1.21.0 in c:\users\nandi\appdata\local\programs\python\python311\lib\site-packages (from pandas) (1.23.4)
Requirement already satisfied: six>=1.5 in c:\users\nandi\appdata\local\programs\python\python311\lib\site-packages (from python-dateutil>=2.8.1->pandas) (1.16.0)
```

It's showing that 'pandas' is already installed.

### Screenshots that you successfully established your connection with Postgres

```
===== RESTART: C:\Users\nandi\Desktop\DBMS Project\phase_3\connecting_to_python.py =====
PostgreSQL server information
{'user': 'postgres', 'channel_binding': 'prefer', 'dbname': 'postgres', 'host': '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',)
```

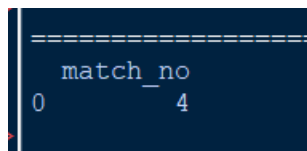
## 2 new questions

1. Write a query in SQL to find the total number of goalless draws have there in the entire tournament.

ANS:      `SELECT COUNT(DISTINCT match_no`  
             `FROM match_details`  
             `WHERE win_loss = 'D'`  
             `AND goal_score = '0'`

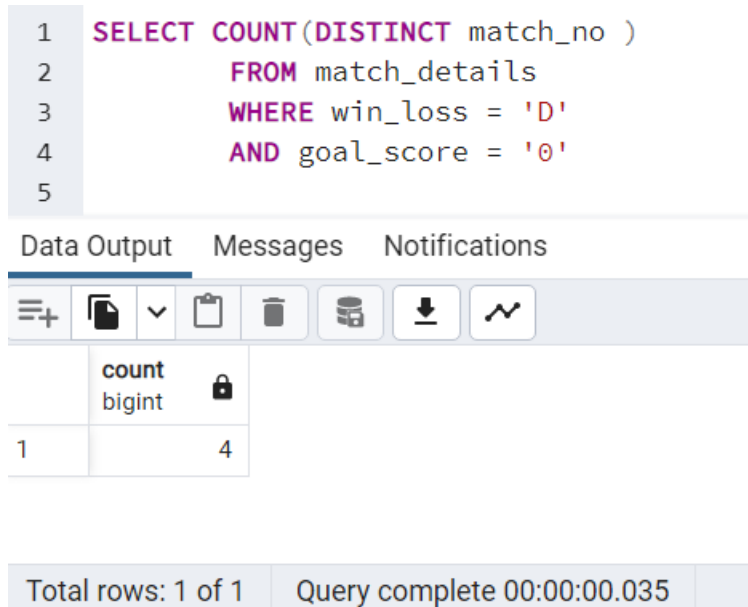
Output using Python:

No. of rows returned: 1



match_no
0
4

Output of same query in pgAdmin:



```
1 SELECT COUNT(DISTINCT match_no )
2     FROM match_details
3     WHERE win_loss = 'D'
4     AND goal_score = '0'
5
```

Data Output		Messages	Notifications
	count bigint		
1	4		

Total rows: 1 of 1    Query complete 00:00:00.035

2. write a SQL query to find the highest audience match. Return match\_no, play\_stage, audience.

ANS:       SELECT match\_no, play\_stage, audience  
          FROM match\_mast  
          WHERE audience=(SELECT max(audience)  
                              FROM match\_mast);

Output using Python:

No. of rows returned: 1

```
=====
match_no play_stage audience
0      48          Q      76833
```

Output of same query in pgAdmin:

1 SELECT match\_no, play\_stage, audience  
2 FROM match\_mast  
3 WHERE audience=(SELECT max(audience)  
4 FROM match\_mast);  
5

Data Output Messages Notifications

	match_no [PK] character varying (100)	play_stage character varying	audience integer
1	48	Q	76833

Total rows: 1 of 1 Query complete 00:00:00.096