Console

```
import psycopg2
from texttable import Texttable
import re


try:
    connection=psycopg2.connect(
                                        host="10.100.71.21",
                                        port="5432",
                                        user="201701111",
                                        password="201701111",
                                        database="201701111"
                                        )
except psycopg2.OperationalError as e:
    print('Unable to connect!\n{0}').format(e)
    exit(1)
else:
#connect to db
    print("You are connected to 201701111")

#Cursor
cursor=connection.cursor()

#query execute
cursor.execute("SET SEARCH_PATH TO Project_Parliament")
#cursor.execute("select * from team")
#if you are make any changes in data base then you have to do commit following:
#connection.commit()
```

```
#take data from query

#rows=cursor.fetchall()

#for r in rows:

  #      print(f"Team_Name: {r[0]} | Manager: {r[1]} | Country: {r[2]}")



def q1():

        q = """SET SEARCH_PATH TO "Project_Parliament";

SELECT ROUND(sum(case when af.GENDER = 'M' then 1.0 else 0 end)/count(*),3) as male_ratio,

              ROUND(sum(case when af.GENDER = 'F' then 1.0 else 0 end)/count(*),3) as
female_ratio,e.party_id

FROM ("Member" AS e JOIN affidavit AS af ON (e.affidavit_no = af.affidavit_no))

GROUP BY e.party_id;"""

        cursor.execute(q)

        rows=cursor.fetchall()


        x=[]

        x.append(['MALE_RATIO','FEMALE_RATIO','PARTY_ID'])

        x.extend(rows)


        t = Texttable()

        t.add_rows(x,header=True)

        print(t.draw())

        return


def q2():

        q = """SET SEARCH_PATH TO "Project_Parliament"; SELECT EXTRACT(MONTH FROM BIRTH_DATE)
AS Month,count(af.affidavit_no) AS Nos_Of_BirthDays,e.TERM_ID FROM "Member" AS e JOIN affidavit
AS af ON (e.affidavit_no = af.affidavit_no) GROUP BY Month,e.TERM_ID ORDER BY nos_of_birthdays
DESC;"""
```

```
    cursor.execute(q)
    rows=cursor.fetchall()
    x=[]
    x.append(['Month', 'Nos_Of_BirthDays','TERM_ID'])

    for r in rows:
        x.append(r)
    t = Texttable()
    t.add_rows(x,header=True)
    print(t.draw())
    return

def q3():
    q = """SET SEARCH_PATH TO "Project_Parliament";SELECT Member_ID , "Member"."Name",
Aadhar_ID , LS_Term.Term_ID AS TERM_ID FROM ("Member" JOIN LS_Term ON LS_Term.Term_ID =
"Member".Term_ID) WHERE LS_Term.Term_End_Date > "Member".End_Date;"""
    cursor.execute(q)
    rows=cursor.fetchall()

    x=[]
    x.append(['Member_ID', 'Name','Aadhar_ID','TERM_ID'])
    for r in rows:
        x.append(r)
    t = Texttable()
    t.add_rows(x,header=True)
    print(t.draw())
    return

def q4():
```

```
    q = """SET SEARCH_PATH TO "Project_Parliament";SELECT count(X.Member_ID) AS
nos_of_party_members,X.PARTY_NAME FROM ("Member" as me JOIN PARTY as pa ON (me.party_id =
pa.party_id and me.TERM_ID = '17')) AS X GROUP BY X.PARTY_NAME;"""

    cursor.execute(q)

    rows=cursor.fetchall()

    x=[]

    x.append(['Nos_of_MPs', 'PARTY'])


    for r in rows:

        x.append(r)

    t = Texttable()

    t.add_rows(x,header=True)

    print(t.draw())

    return


def q5():

    q = """SET SEARCH_PATH TO "Project_Parliament";SELECT "Member"."Name",
party_name,Position_Title, "Member".Member_ID,"Member".Term_ID,"Member".Session_ID FROM
("Member" NATURAL JOIN "Holds") NATURAL JOIN party;"""

    cursor.execute(q)

    rows=cursor.fetchall()

    x=[]

    x.append(['Member_NAME',
'Party_Name','Important_Position','Member_ID','Term_ID','Session_ID'])


    for r in rows:

        x.append(r)

    t = Texttable()

    t.add_rows(x,header=True)

    print(t.draw())
```

```
    return


def q7():
    q = """SET SEARCH_PATH TO "Project_Parliament";SELECT "Member".Member_ID FROM
("Member" JOIN bills ON "Member".Member_ID = Bills.Member_ID) WHERE bills.bill_type = 'MONEY'
GROUP BY "Member".Member_ID ORDER BY "Member".Member_ID DESC;"""
    cursor.execute(q)
    rows=cursor.fetchall()
    x=[]
    x.append(['Member_ID'])

    for r in rows:
        x.append(r)
    t = Texttable()
    t.add_rows(x,header=True)
    print(t.draw())
    return


def q8():
    x = input("Enter Position_Title of MP :")
    cursor.execute("""SET SEARCH_PATH TO "Project_Parliament";SELECT "Name","State" FROM
(("Holds" as h Join "Member" AS me ON h.member_id = me.member_id) as X JOIN
Lok_Sabha_Constituency as LS ON X.constituency_id = LS.constituency_id) As Y WHERE Y.position_title =
'"+x+"';""")
    rows=cursor.fetchall()
    x=[]
    x.append(['Name', 'State'])

    for r in rows:
```

```
            x.append(r)
        t = Texttable()
        t.add_rows(x,header=True)
        print(t.draw())
        return

def INFO_MP():
        TERM_ID=input("Enter Your Term Id in Charcter Varying format:")
        cursor.execute("""SET SEARCH_PATH TO "Project_Parliament";SELECT * FROM
INFO_MP('"+TERM_ID+"');""")
        connection.commit()
        return

def NOS_OF_TIMES_WON():
        MP_ID = input("Enter the Member_ID Charcter Varying format")
        query="""SET SEARCH_PATH TO "Project_Parliament";SELECT * FROM
NOS_OF_TIMES_WON('"+MP_ID+"');"""

        cursor.execute(query)
        connection.commit()
        return

def command(choice):
        if choice=='1':
            q1()
        elif choice=='2':
            q2()
        elif choice=='3':
            q3()
```

```
    elif choice=='4':
        q4()
    elif choice=='5':
        q5()
    elif choice=='7':
        q7()
    elif choice=='8':
        q8()
    elif choice=='T':
        INFO_MP()
    elif choice=='M':
        NOS_OF_TIMES_WON()
    else:
        print("Invalide choice")
    return

while True:
    # Queries
    print("1. Ratio of Female and Male Workers of Parties")
    print("2. Month Birthday of Workers according Term")
    print("3. Members Who couldn't complete their Whole Term")
    print("4. Partywise number of MPs present in the Parliament")
    print("5. Partywise important positions held during term/Session")
    print("7. Arrange the members according to the number money bills presented.")
    print("8. Name of MPs for Different positions.")
    print("9. Find the Party with max. possibility to form the Government")
    print("10. Nos. of Times a MP is elected for Parliament. ")

    print("--->Type 'q' for end session")
```

```
        choice=input("Enter Your Choice:")
        if choice=='q':
                break
        command(choice)



if(connection):
        #close the cursor
        cursor.close()
        #Close connection
        connection.close()
        print("Connection closed to 201701111")
```