

# Assignment 7

Creating a Database:

Code:

Create database demodb2;

Output:

```
SQL Shell (psql)
Password for user postgres:
psql (17.5)
WARNING: Console code page (437) differs from Windows code page (1252)
8-bit characters might not work correctly. See psql reference
page "Notes for Windows users" for details.
Type "help" for help.

postgres=# \l
          List of databases
  Name | Owner | Encoding | Locale Provider | Collate | Ctype | Locale | ICU Rules | Access privileges
-----+-----+-----+-----+-----+-----+-----+-----+-----
 demodb | postgres | UTF8 | libc | English_India.1252 | English_India.1252 | | | 
 postgres | postgres | UTF8 | libc | English_India.1252 | English_India.1252 | | | 
 template0 | postgres | UTF8 | libc | English_India.1252 | English_India.1252 | | | =c/p
 postgres | + | | | | | | | post
 postgres=CTc/postgres
 template1 | postgres | UTF8 | libc | English_India.1252 | English_India.1252 | | | =c/p
 postgres | + | | | | | | | post
 postgres=CTc/postgres
(4 rows)

postgres=# create database demodb2;
CREATE DATABASE
postgres=#
```

Deleting a Database:

Code:

Drop database demodb2;

Output:

```
SQL Shell (psql)
postgres=# \d
          |          |          |          |          |          |          |          |          |          |
gres=CTc/postgres
(4 rows)

postgres=# create database demodb2;
CREATE DATABASE
postgres=# drop database demodb2;
DROP DATABASE
postgres=# \l
          |          |          |          |          |          |          |          |          |          |
Name      | Owner   | Encoding | Locale Provider | Collate | Ctype   | Locale | ICU Rules | Access privileges
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
demodb    | postgres | UTF8     | libc           | English_India.1252 | English_India.1252 |         |          |
postgres | postgres | UTF8     | libc           | English_India.1252 | English_India.1252 |         |          |
template0 | postgres | UTF8     | libc           | English_India.1252 | English_India.1252 |         |          |
ostgres   |          |          |          |          |          |          |          |
gres=CTc/postgres
template1 | postgres | UTF8     | libc           | English_India.1252 | English_India.1252 |         |          |
ostgres   |          |          |          |          |          |          |          |
gres=CTc/postgres
(4 rows)

postgres=#
```

Creating Table and adding data:

Code:

```
create table employees(id int,name text,salary int);
Insert into employees(id,name,salary) value (101,'ohm',35000);
```

Output:

```
SQL Shell (psql)
gres=CTc/postgres
template1 | postgres | UTF8 | libc | English_India.1252 | English_India.1252 | | =c/p
ostgres | | | | | | | post
gres=CTc/postgres
(4 rows)

postgres=# create database demodb2;
CREATE DATABASE
postgres=# create table employees(id int,name text,salary int);
ERROR: relation "employees" already exists
postgres=# \c demodb2
You are now connected to database "demodb2" as user "postgres".
demodb2=# create table employees(id int,name text,salary int);
CREATE TABLE
demodb2=# insert into employees(id,name,salary) value (101,'ohm',35000);
ERROR: syntax error at or near "value"
LINE 1: insert into employees(id,name,salary) value (101,'ohm',35000...
                                                ^
demodb2=# insert into employees(id,name,salary) values(101,'ohm',35000);
INSERT 0 1
demodb2=# select * from employees;
 id | name | salary
-----+-----+-----
 101 | ohm  | 35000
(1 row)

demodb2=#
```

Retrieving data from database and deleting contents in the table

Code:

Select \* from employees;

Truncate employees;

Output:

```
SQL Shell (psql)
CREATE DATABASE
postgres=# create table employees(id int,name text,salary int);
ERROR:  relation "employees" already exists
postgres=# \c demodb2
You are now connected to database "demodb2" as user "postgres".
demodb2=# create table employees(id int,name text,salary int);
CREATE TABLE
demodb2=# insert into employees(id,name,salary) value (101,'ohm',35000);
ERROR:  syntax error at or near "value"
LINE 1: insert into employees(id,name,salary) value (101,'ohm',35000...
                                                ^
demodb2=# insert into employees(id,name,salary) values(101,'ohm',35000);
INSERT 0 1
demodb2=# select * from employees;
 id | name | salary
-----+-----+-----
 101 | ohm  | 35000
(1 row)

demodb2=# Select * from employees;
 id | name | salary
-----+-----+-----
 101 | ohm  | 35000
(1 row)

demodb2=# Truncate employees;
TRUNCATE TABLE
demodb2=#
```

Connecting to the database:

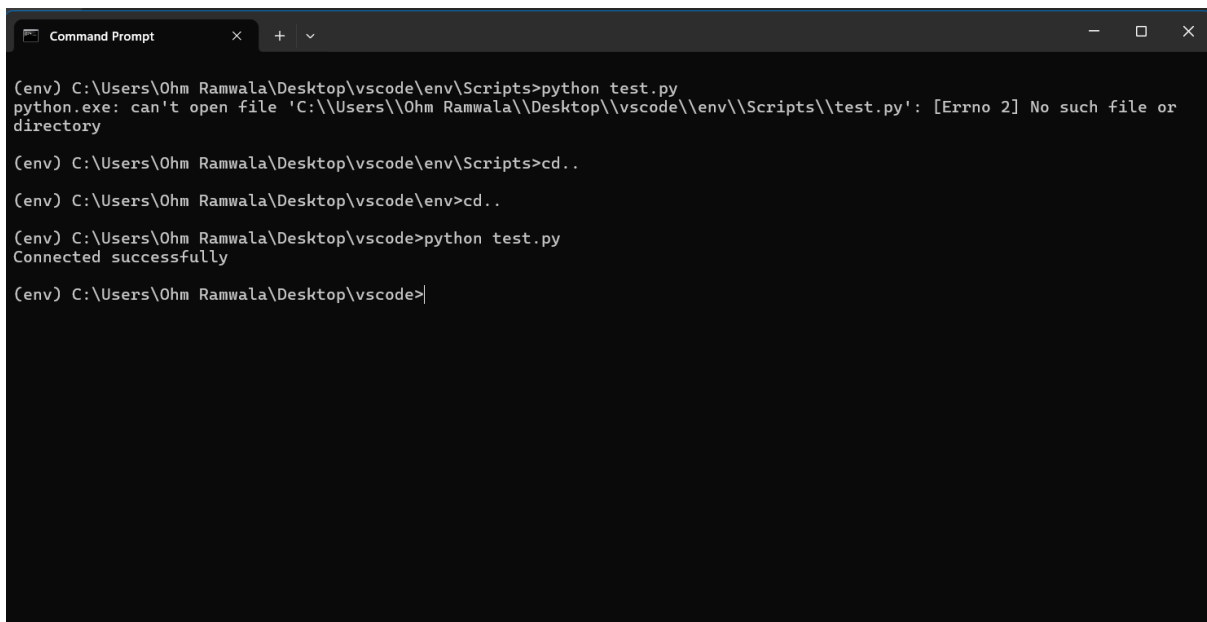
Code:

```
import psycopg2
conn =
psycopg2.connect(dbname="postgres",user="postgres",password="12345",host="localhost",
port="5433")
```

```
cursor = conn.cursor()
print("Connected successfully")
```

```
conn.commit()
conn.close()
```

Output:



```
Command Prompt
(env) C:\Users\Ohm Ramwala\Desktop\vscode\env\Scripts>python test.py
python.exe: can't open file 'C:\\Users\\Ohm Ramwala\\Desktop\\vscode\\env\\Scripts\\test.py': [Errno 2] No such file or
directory

(env) C:\Users\Ohm Ramwala\Desktop\vscode\env\Scripts>cd..
(env) C:\Users\Ohm Ramwala\Desktop\vscode\env>cd..
(env) C:\Users\Ohm Ramwala\Desktop\vscode>python test.py
Connected successfully
(env) C:\Users\Ohm Ramwala\Desktop\vscode>
```

Creating table using python:

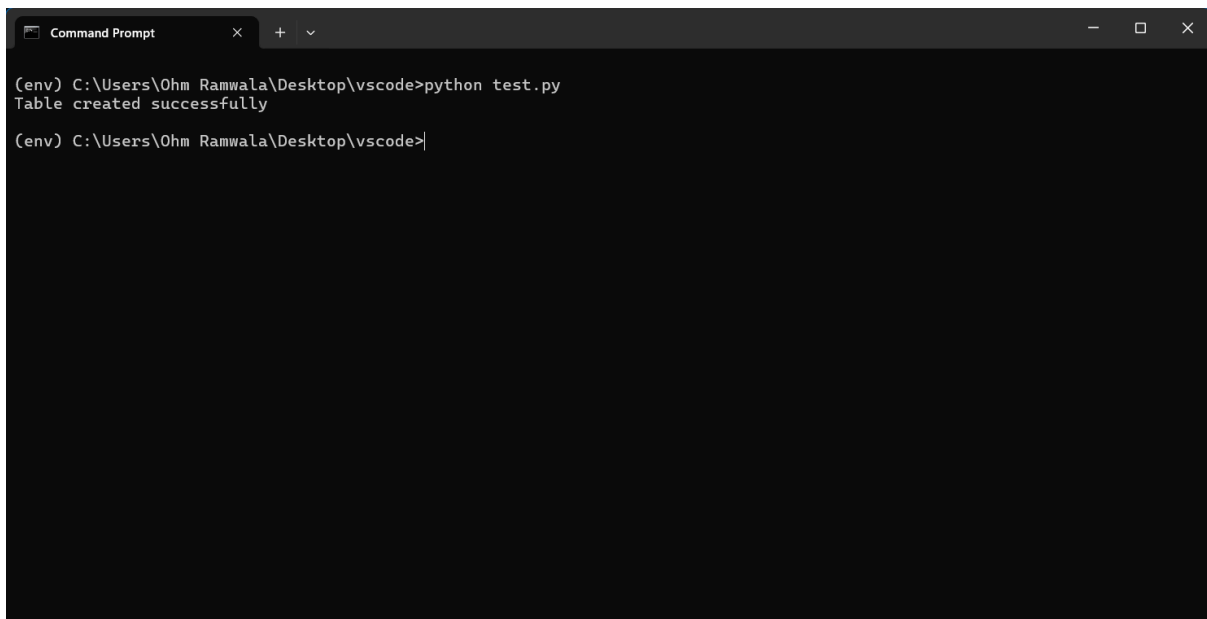
Code:

```
import psycopg2
conn =
psycopg2.connect(dbname="demodb2",user="postgres",password="12345",host="localhost"
,port="5433")
```

```
cursor = conn.cursor()
cursor.execute("create table employee(id int,name text,phone int);")
print("Table created successfully")
```

```
conn.commit()
conn.close()
```

Output:

A screenshot of a Windows Command Prompt window. The title bar shows 'Command Prompt' with standard window controls. The command prompt shows the execution of a Python script: `(env) C:\Users\Ohm Ramwala\Desktop\vscode>python test.py`. The output of the script is `Table created successfully`. The prompt then returns to `(env) C:\Users\Ohm Ramwala\Desktop\vscode>`.

```
(env) C:\Users\Ohm Ramwala\Desktop\vscode>python test.py
Table created successfully
(env) C:\Users\Ohm Ramwala\Desktop\vscode>
```

```
SQL Shell (psql)
demodb2=# insert into employees(id,name,salary) values(101,'ohm',35000);
INSERT 0 1
demodb2=# select * from employees;
 id | name | salary 
-----+-----+-----
 101 | ohm  | 35000 
(1 row)

demodb2=# Select * from employees;
 id | name | salary 
-----+-----+-----
 101 | ohm  | 35000 
(1 row)

demodb2=# Truncate employees;
TRUNCATE TABLE
demodb2=# select * from employe
demodb2=# select * from employe;
ERROR:  syntax error at or near "select"
LINE 2: select * from employe;
        ^
demodb2=# select * from employe;
 id | name | phone 
-----+-----+-----
(0 rows)

demodb2=# |
```

Inserting the data using python:

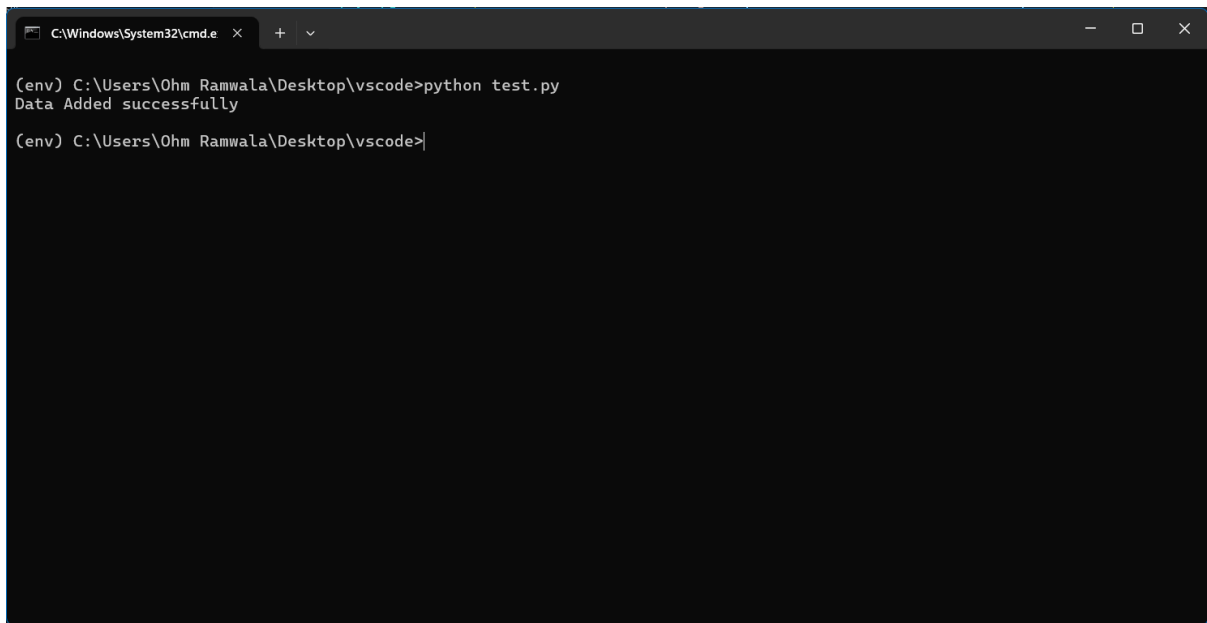
Code:

```
import psycopg2
conn =
psycopg2.connect(dbname="demodb2",user="postgres",password="12345",host="localhost"
,port="5433")
```

```
cursor = conn.cursor()
cursor.execute("insert into employe(id,name,phone) values(10,'Jay',94280);")
print("Data Added successfully")
```

```
conn.commit()
conn.close()
```

Output:

A screenshot of a Windows command prompt window. The title bar shows the file path 'C:\Windows\System32\cmd.e' and standard window controls. The command prompt shows the execution of a Python script: '(env) C:\Users\Olm Ramwala\Desktop\vscode>python test.py'. The output of the script is 'Data Added successfully'. The prompt then shows the user returning to the command line: '(env) C:\Users\Olm Ramwala\Desktop\vscode>|'.

```
(env) C:\Windows\System32\cmd.e  X + v
(env) C:\Users\Olm Ramwala\Desktop\vscode>python test.py
Data Added successfully
(env) C:\Users\Olm Ramwala\Desktop\vscode>|
```



```
SQL Shell (psql) x + v

demodb2=# Select * from employees;
 id | name | salary 
-----+-----
 101 | ohm  | 35000 
(1 row)

demodb2=# Truncate employees;
TRUNCATE TABLE
demodb2=# select * from employe
demodb2=# select * from employe;
ERROR:  syntax error at or near "select"
LINE 2: select * from employe;
        ^
demodb2=# select * from employe;
 id | name | phone 
-----+-----
(0 rows)

demodb2=# select * from employe;
 id | name | phone 
-----+-----
  10 | Jay  | 94280 
(1 row)

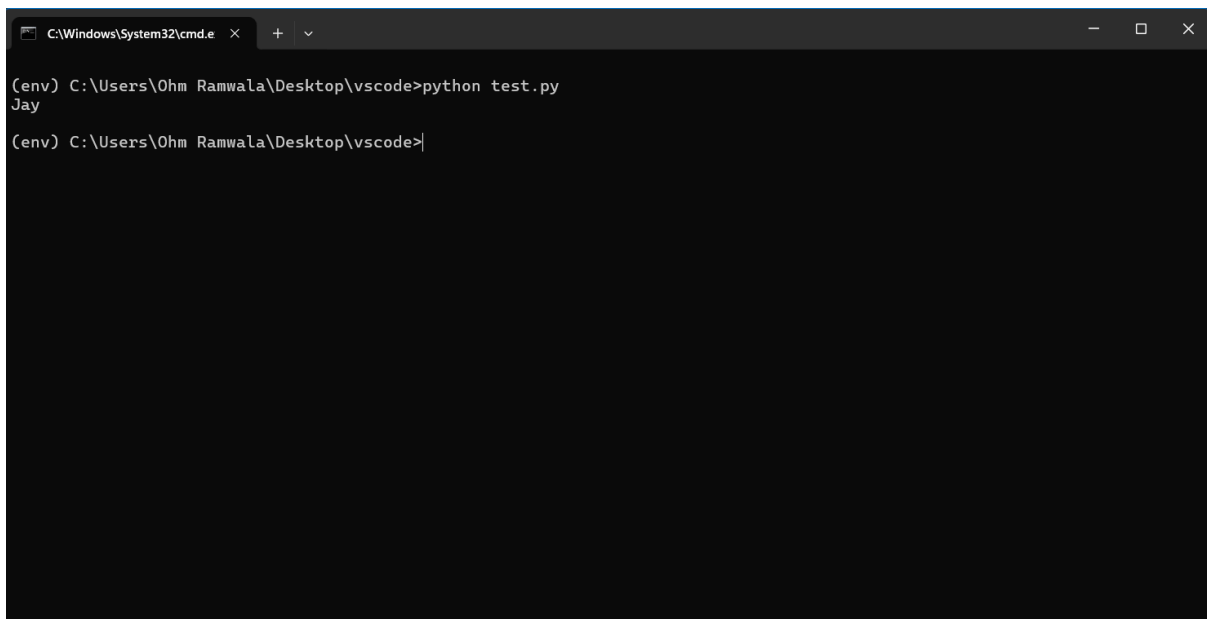
demodb2=# |
```

Extracting the data from the database:

Code:

```
def extract():  
    conn =  
    psycopg2.connect(dbname="demodb2",user="postgres",password="12345",host="localhost"  
    ,port="5433")  
  
    cursor = conn.cursor()  
    cursor.execute("select name from employee")  
    show = cursor.fetchone()  
    print(show[0])  
    # print("Data added successfully")  
  
    conn.commit()  
    conn.close()  
  
extract()
```

Output:



The screenshot shows a Windows command prompt window with the title bar "C:\Windows\System32\cmd.exe". The window contains the following text:

```
(env) C:\Users\Ohm Ramwala\Desktop\vscode>python test.py  
Jay  
(env) C:\Users\Ohm Ramwala\Desktop\vscode>|
```

```
SQL Shell (psql)

demodb2=# Truncate employees;
TRUNCATE TABLE
demodb2=# select * from employe
demodb2=# select * from employe;
ERROR: syntax error at or near "select"
LINE 2: select * from employe;
        ^

demodb2=# select * from employe;
 id | name | phone
-----+-----
(0 rows)

demodb2=# select * from employe;
 id | name | phone
-----+-----
 10 | Jay  | 94280
(1 row)

demodb2=# select name from employe;
 name
-----
 Jay
(1 row)

demodb2=#
```

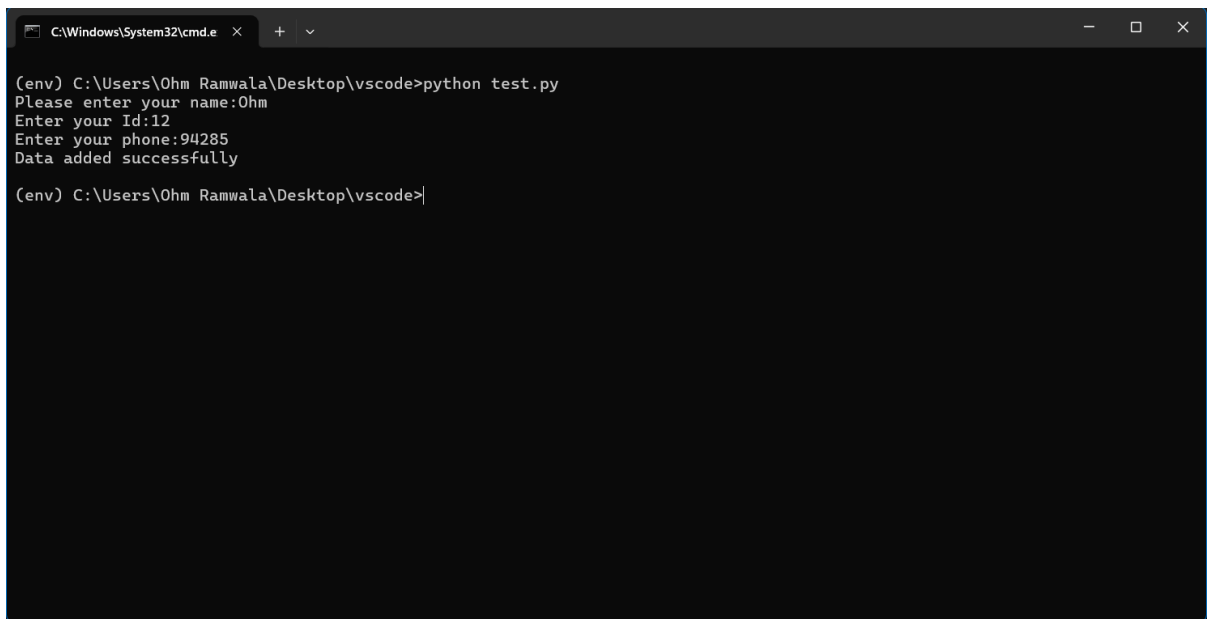
Adding the input from the user:

Code:

```
def data():  
    conn =  
    psycopg2.connect(dbname="demodb2",user="postgres",password="12345",host="localhost"  
    ,port="5433")  
  
    cursor = conn.cursor()  
  
    name=input("Please enter your name:")  
    id=int(input("Enter your Id:"))  
    phone=int(input("Enter your phone:"))  
  
    query = "insert into employe(id,name,phone) values (%s,%s,%s)"  
  
    cursor.execute(query,(id,name,phone))  
    print("Data added successfully")  
  
    conn.commit()  
    conn.close()
```

data()

Output:



```
C:\Windows\System32\cmd.e  x  +  v  
  
(env) C:\Users\Ohm Ramwala\Desktop\vscode>python test.py  
Please enter your name:Ohm  
Enter your Id:12  
Enter your phone:94285  
Data added successfully  
  
(env) C:\Users\Ohm Ramwala\Desktop\vscode>|
```

```
SQL Shell (psql) × + ▾  
  
id | name | phone  
-----  
10 | Jay  | 94280  
(1 row)  
  
demodb2=# select name from employee;  
name  
-----  
Jay  
(1 row)  
  
demodb2=# select name from employee;  
name  
-----  
Jay  
Ohm  
(2 rows)  
  
demodb2=# select * from employee;  
id | name | phone  
-----  
10 | Jay  | 94280  
12 | Ohm  | 94285  
(2 rows)  
  
demodb2=# |
```