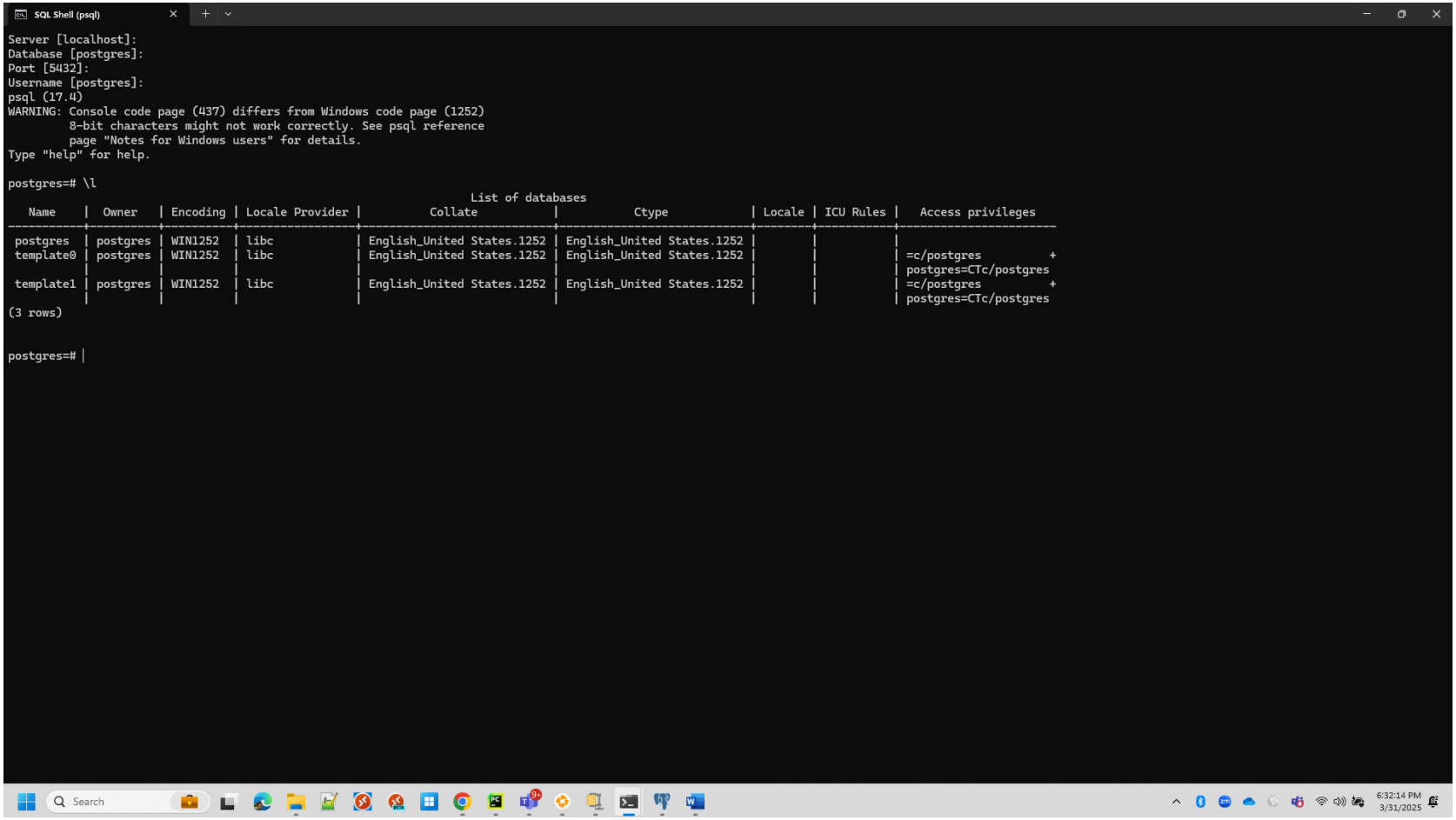
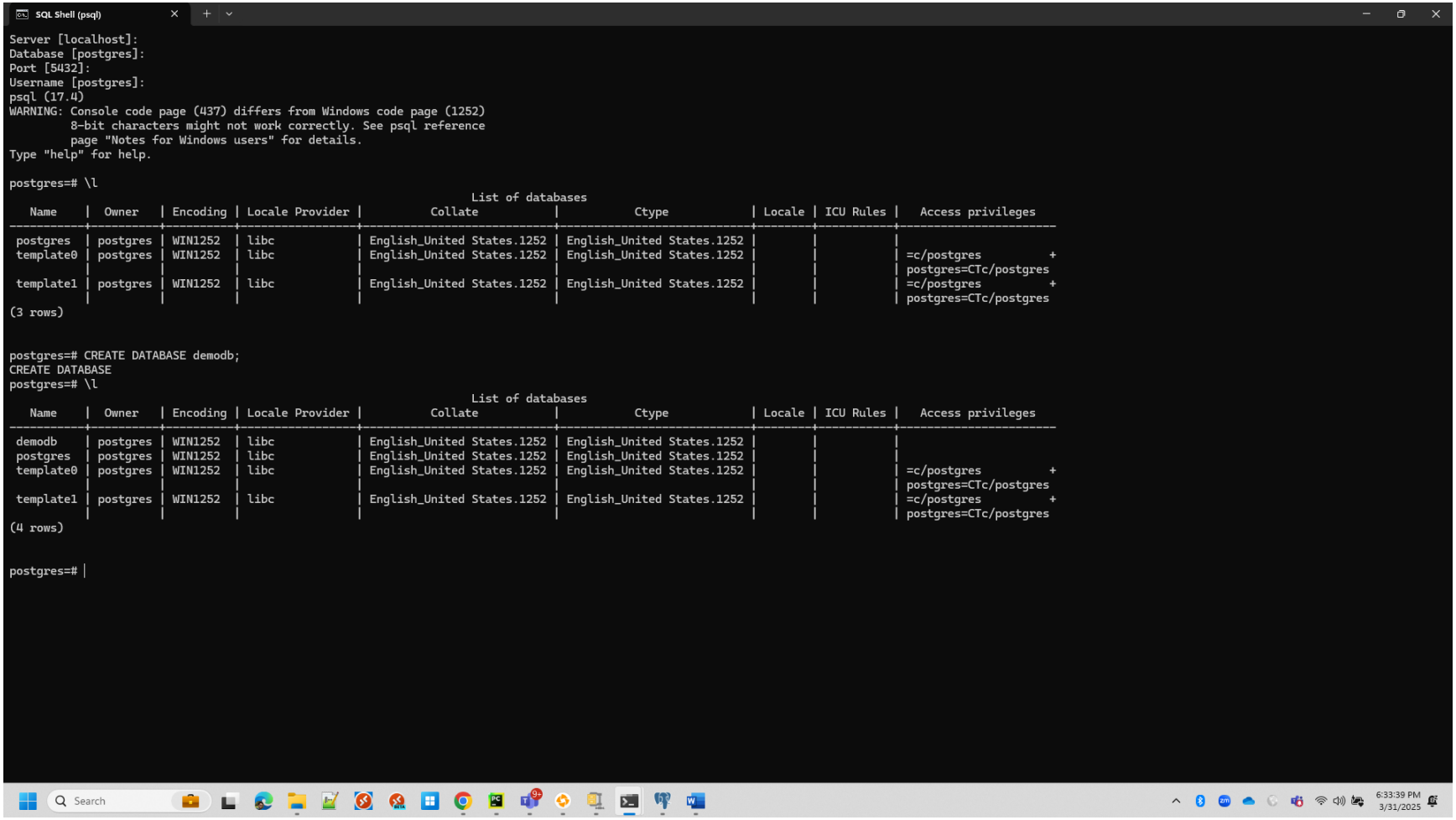
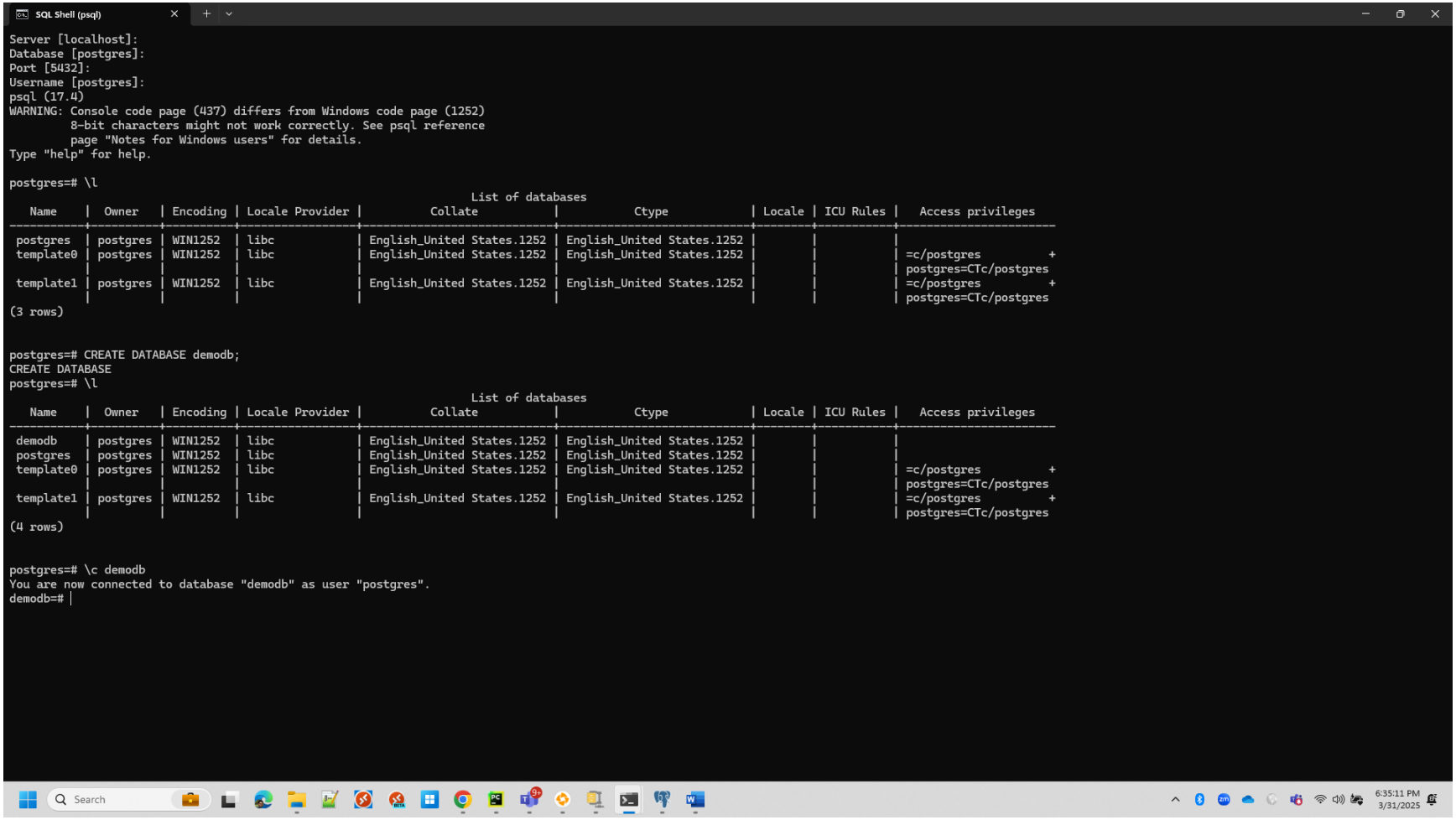
1- Find available databases using “\l” command



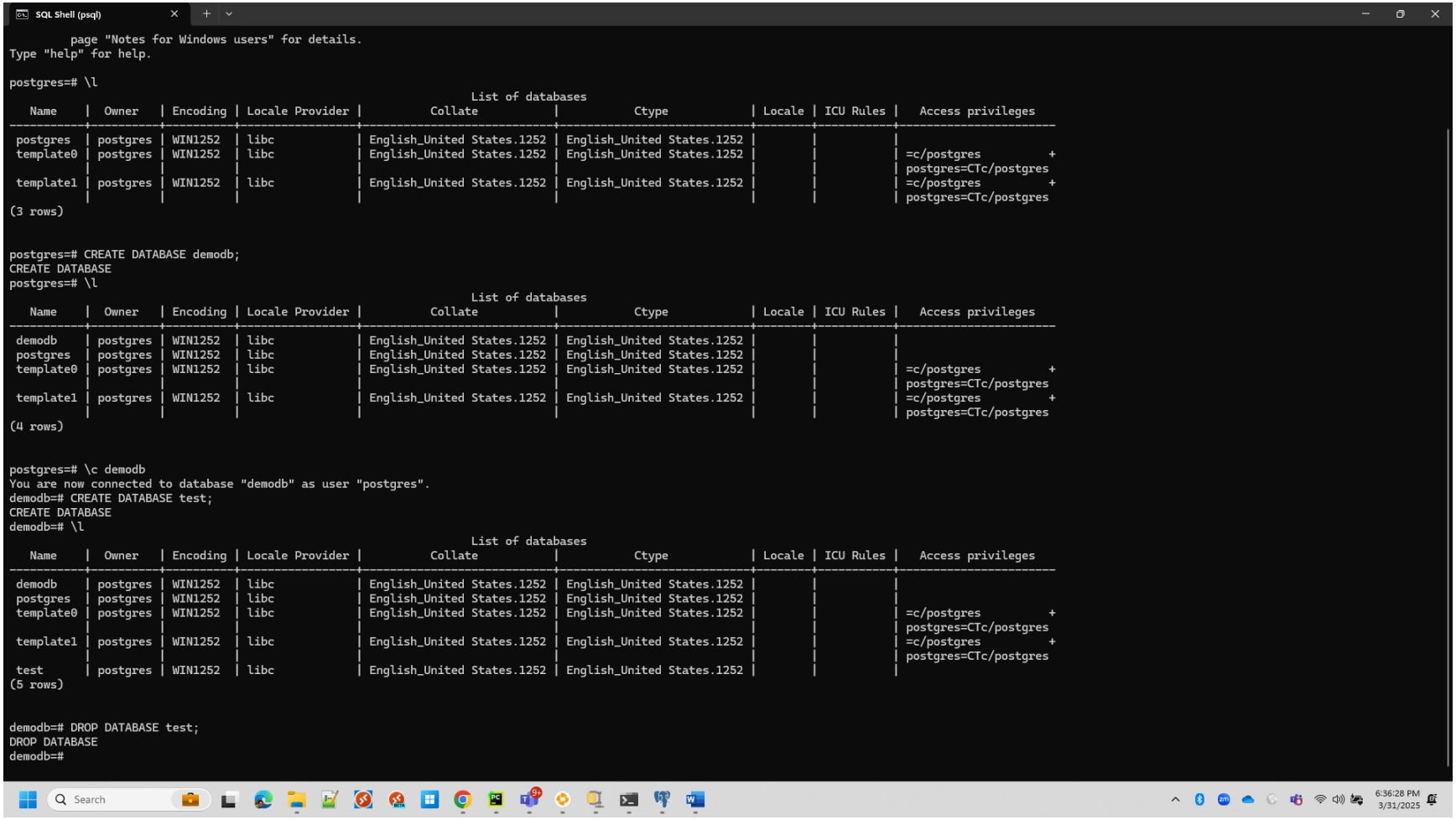
2- Create new database using command “CREATE DATABASE demodb;”



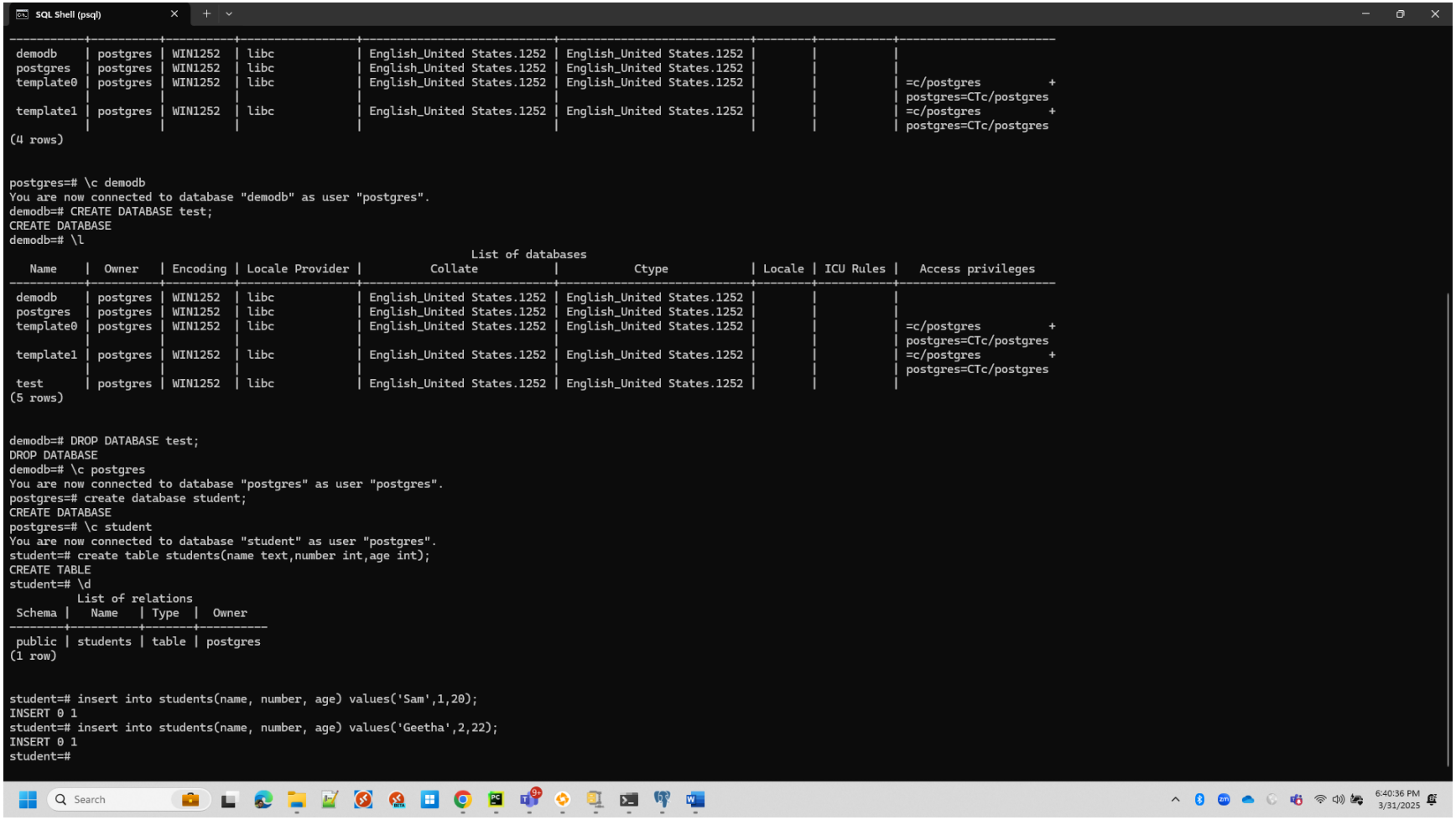
3- Connect to the new database using command “\c demodb”



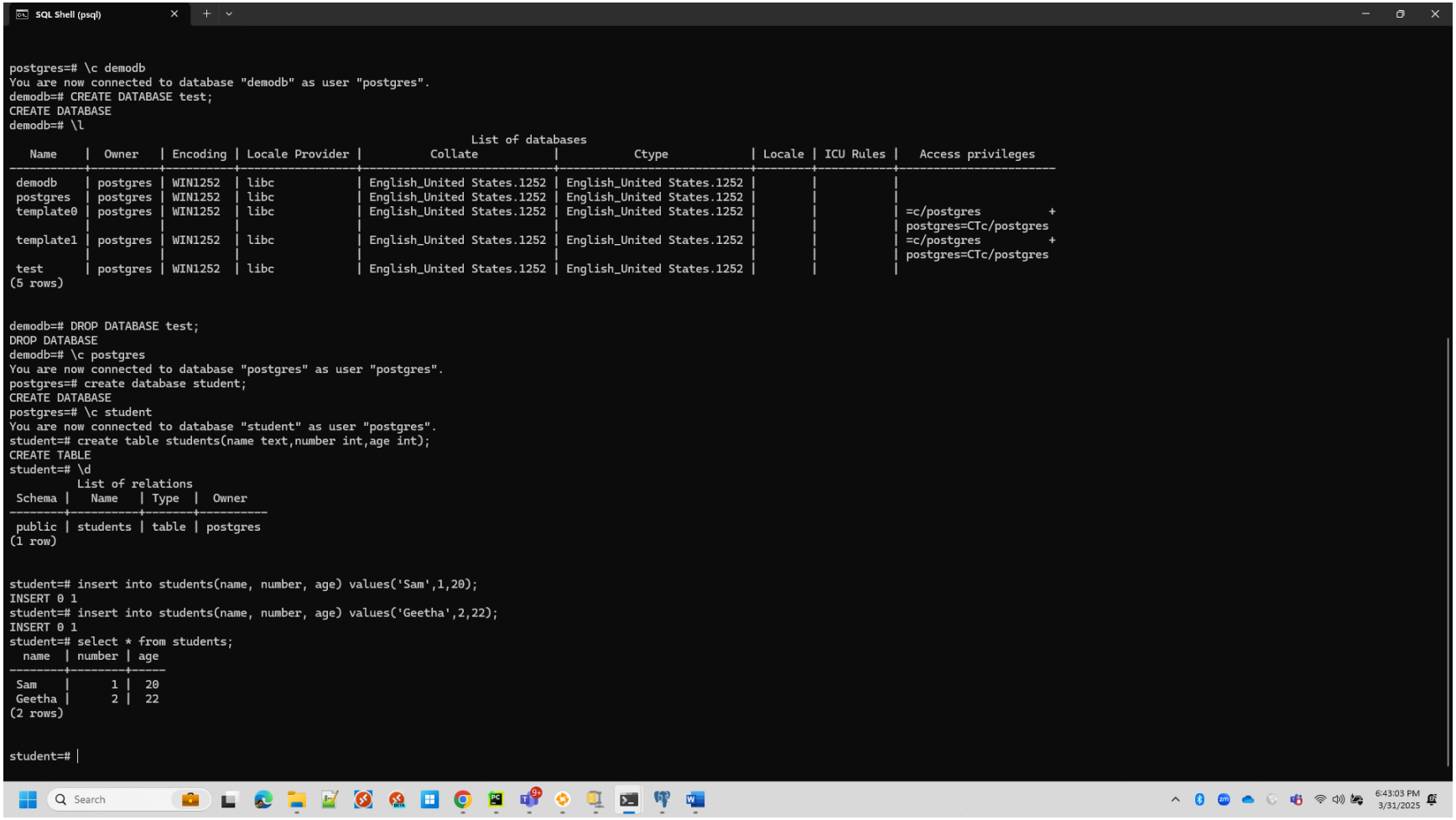
4- Drop database using command “DROP DATABASE test”



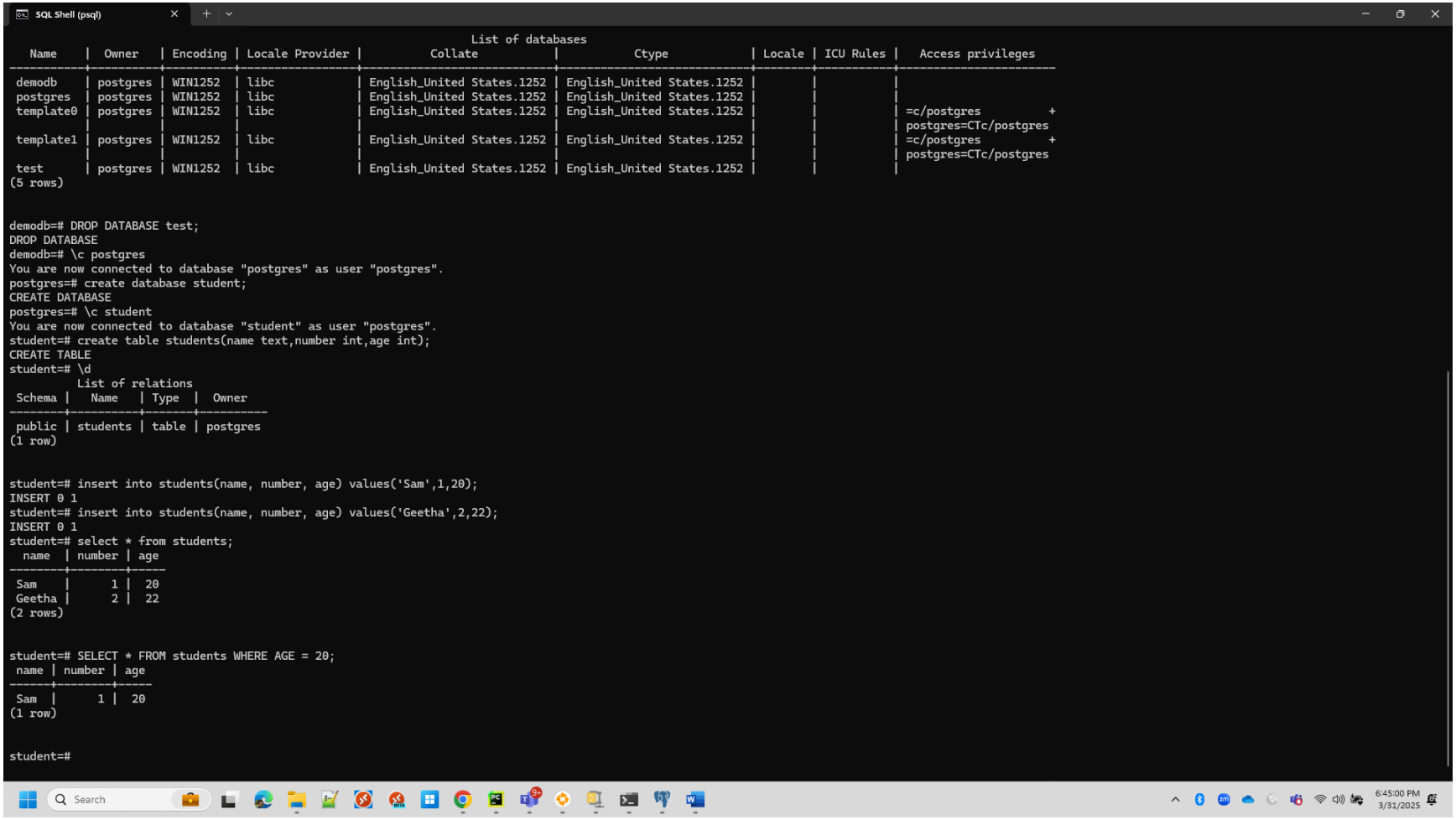
5- Creating table and adding data to it.
Command “CREATE TABLE students(name, number, age);
Command “INSERT INTO students(name. number, age) VALUES(‘Sam’,1,20);



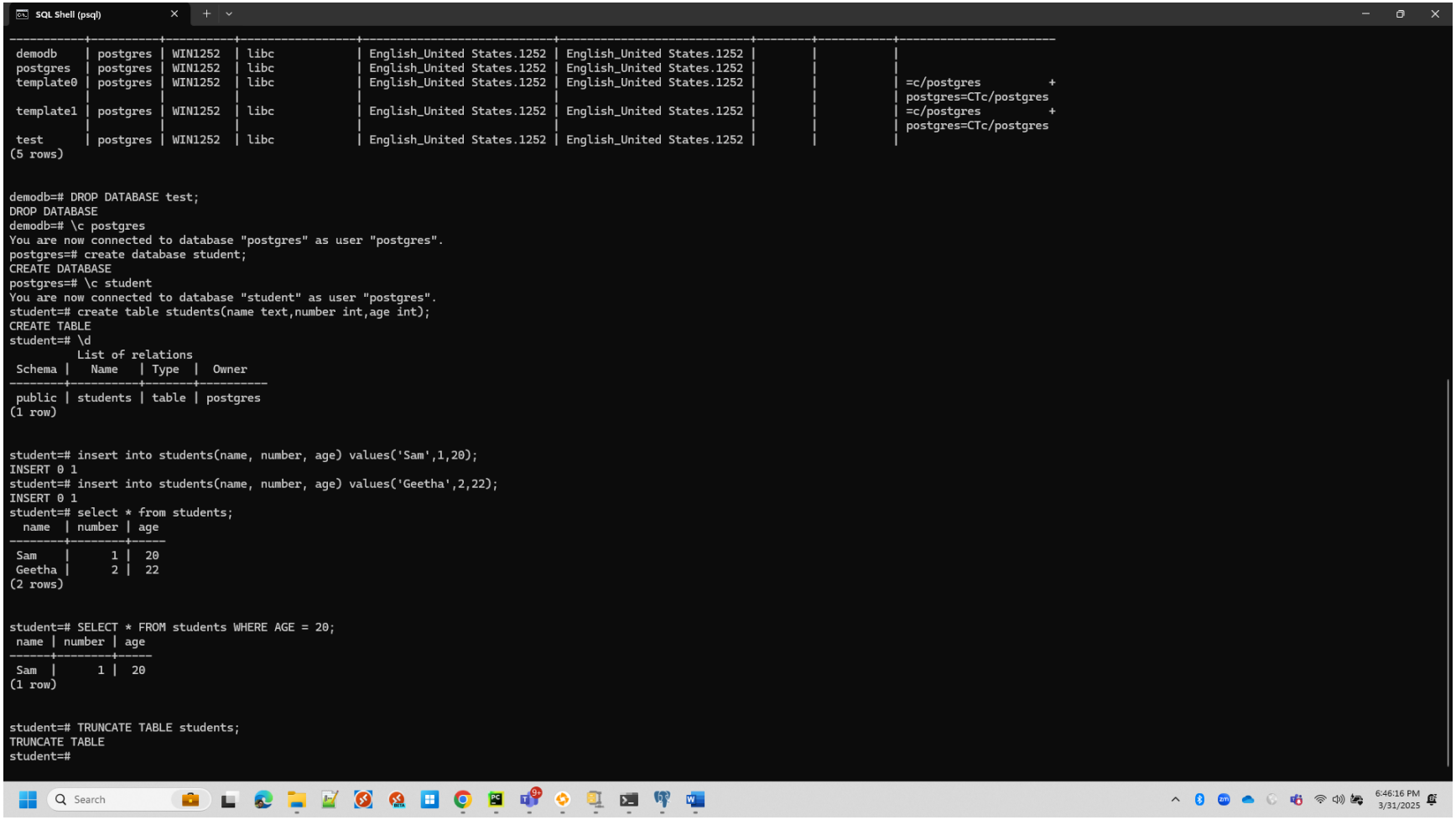
6- Select the data from table using command “SELECT * FROM students;”



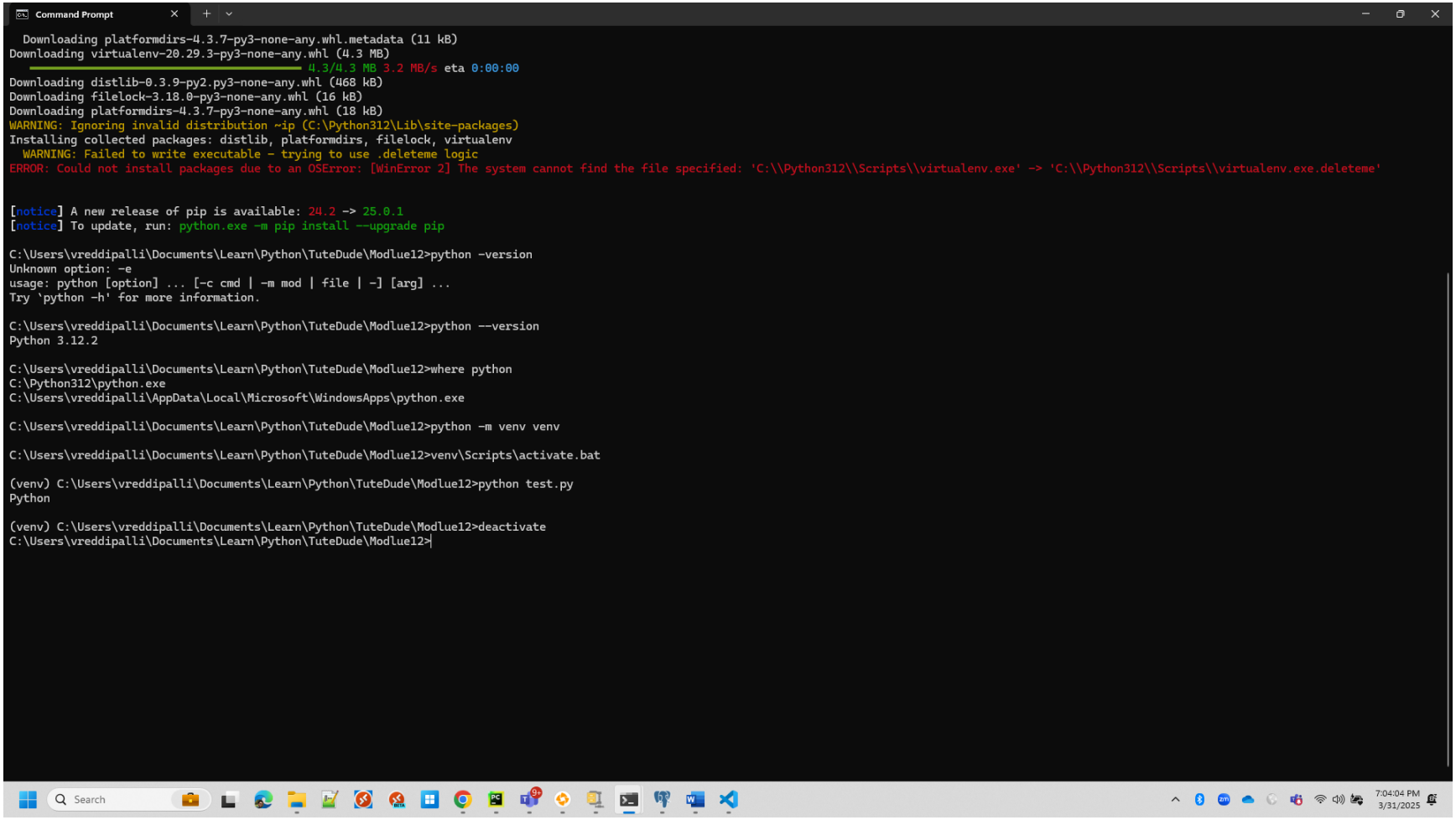
7- Select data based on column value using command “SELECT * FROM students WHERE AGE = 20;”



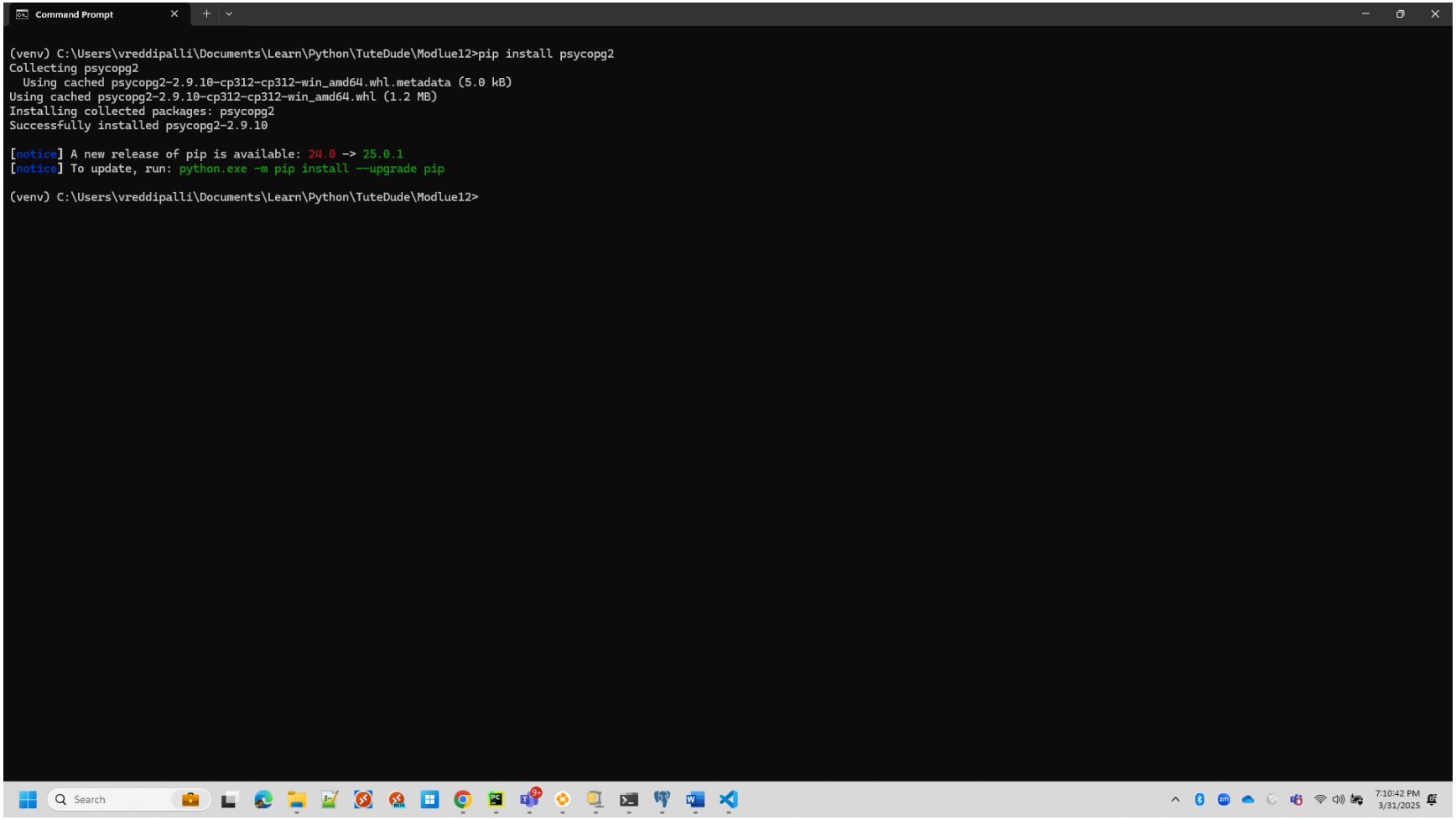
8- Delete the data inside the table using TRUNCATE TABLE command



9- Create project folder and create a virtual environment using “python -m venv name”
And activate the virtual environment using ‘name\Scripts\activate.bat’



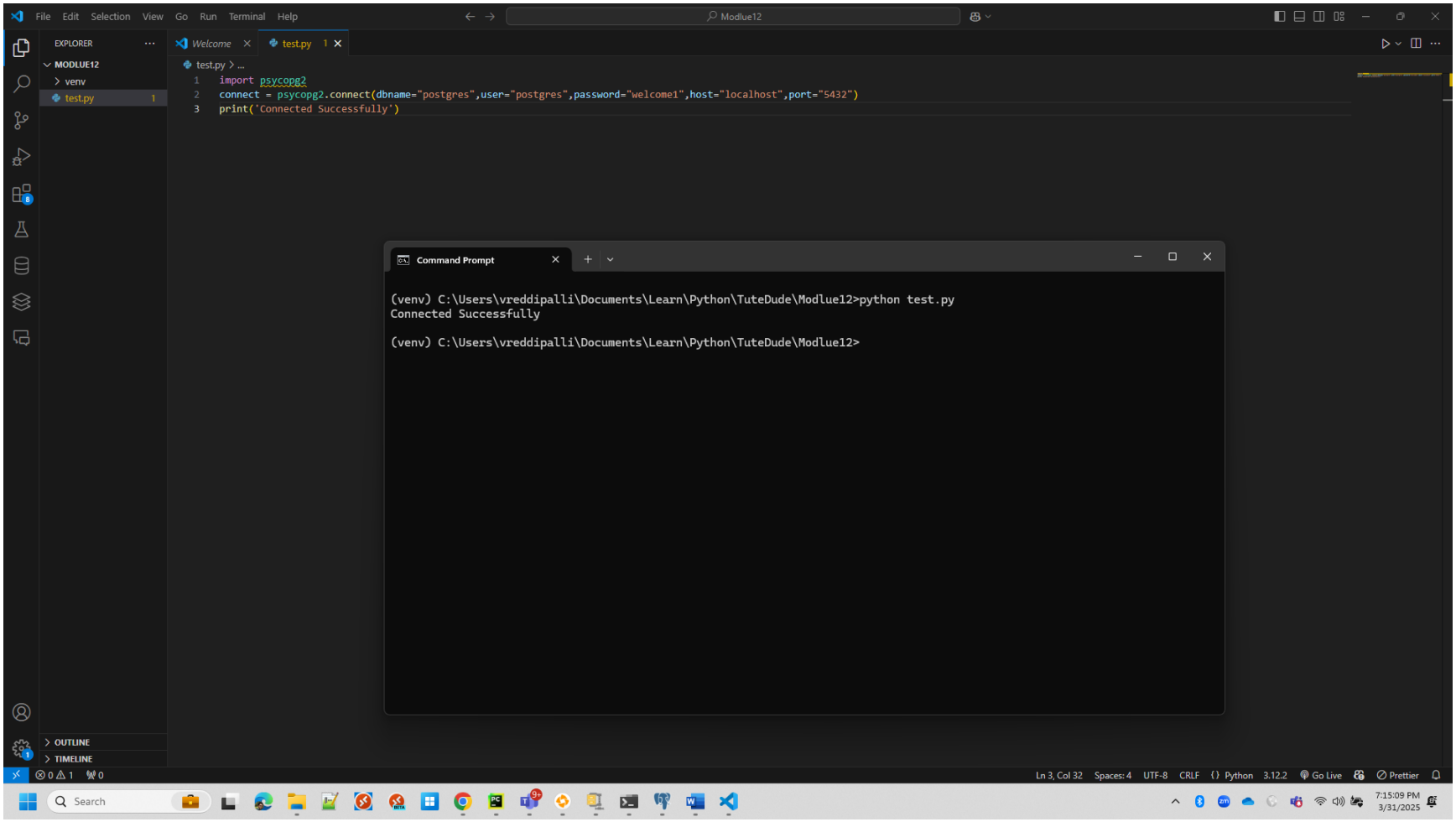
10- Install psycopg2 in the virtual environment using command “pip install psycopg2”



11- Connect to the database using psycopg2 in python.

```
import psycopg2
connect =
psycopg2.connect(dbname="postgres",user="postgres",password="welcome1",host="localhost",port="5432")
```

```
print('Connected Successfully')
```

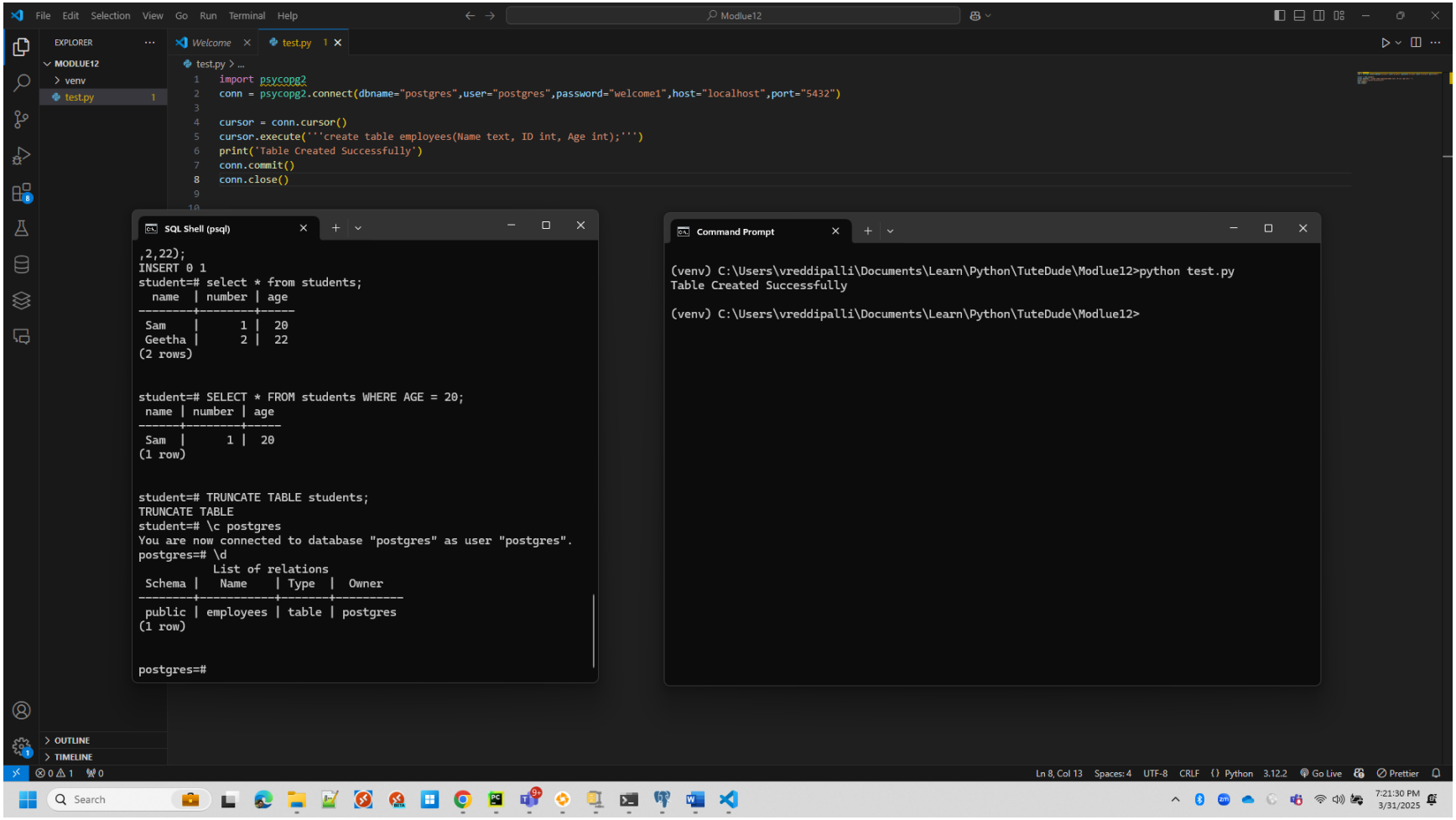


12- Create table in python

```
import psycopg2
```

```
conn =
psycopg2.connect(dbname="postgres",user="postgres",password="welcome1",host="localhost",port="5432")

cursor = conn.cursor()
cursor.execute('''create table employees(Name text, ID int, Age int);''')
print('Table Created Successfully')
conn.commit()
conn.close()
```



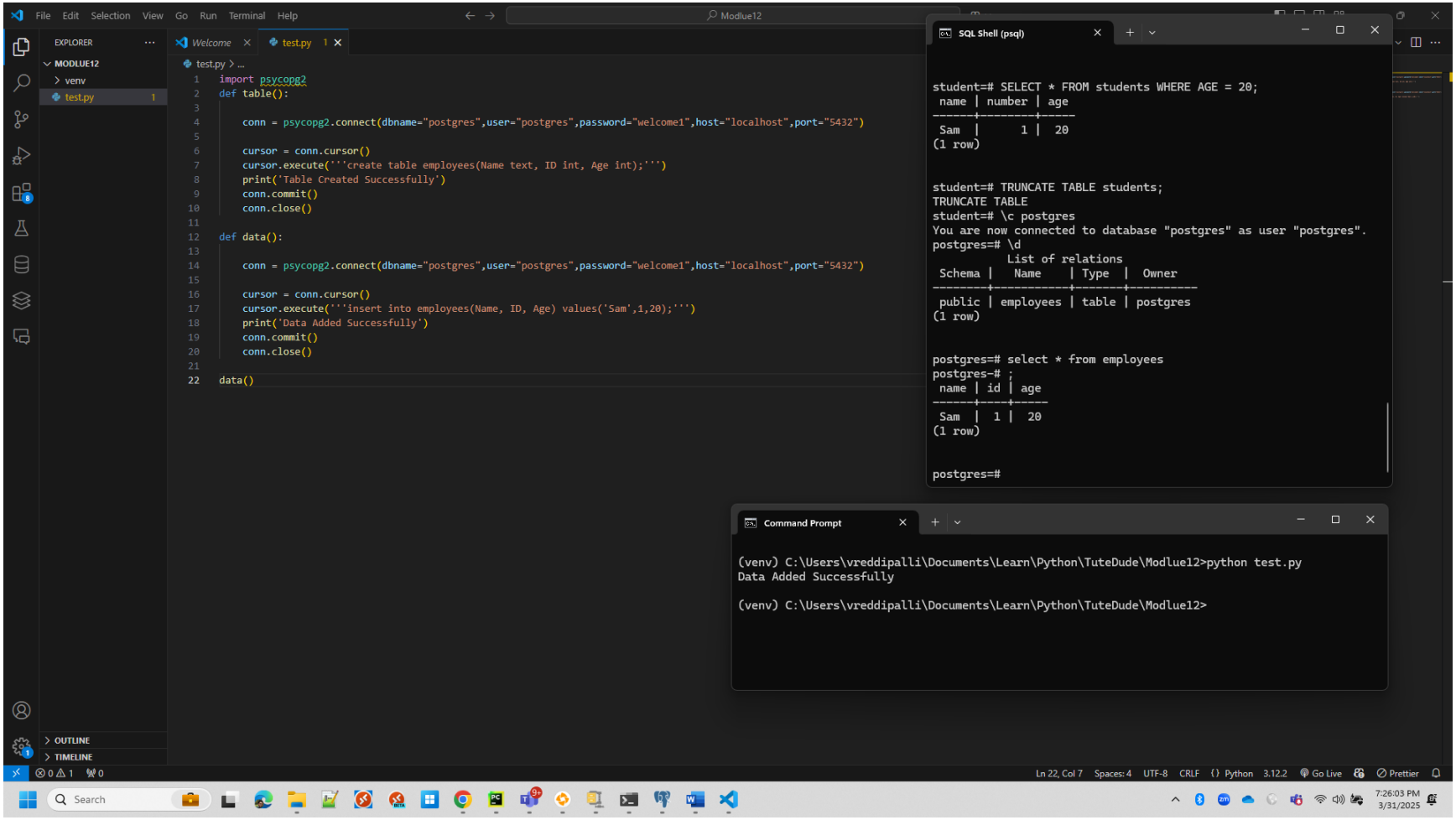
13- Insert data into a table using python

```
import psycopg2
def data():
```

```
    conn =
psycopg2.connect(dbname="postgres",user="postgres",password="welcome1",host="localhost",port="5432")

    cursor = conn.cursor()
    cursor.execute('''insert into employees(Name, ID, Age) values('Sam',1,20);''')
    print('Data Added Successfully')
    conn.commit()
    conn.close()

data()
```



14- Extract the data from the table using python.

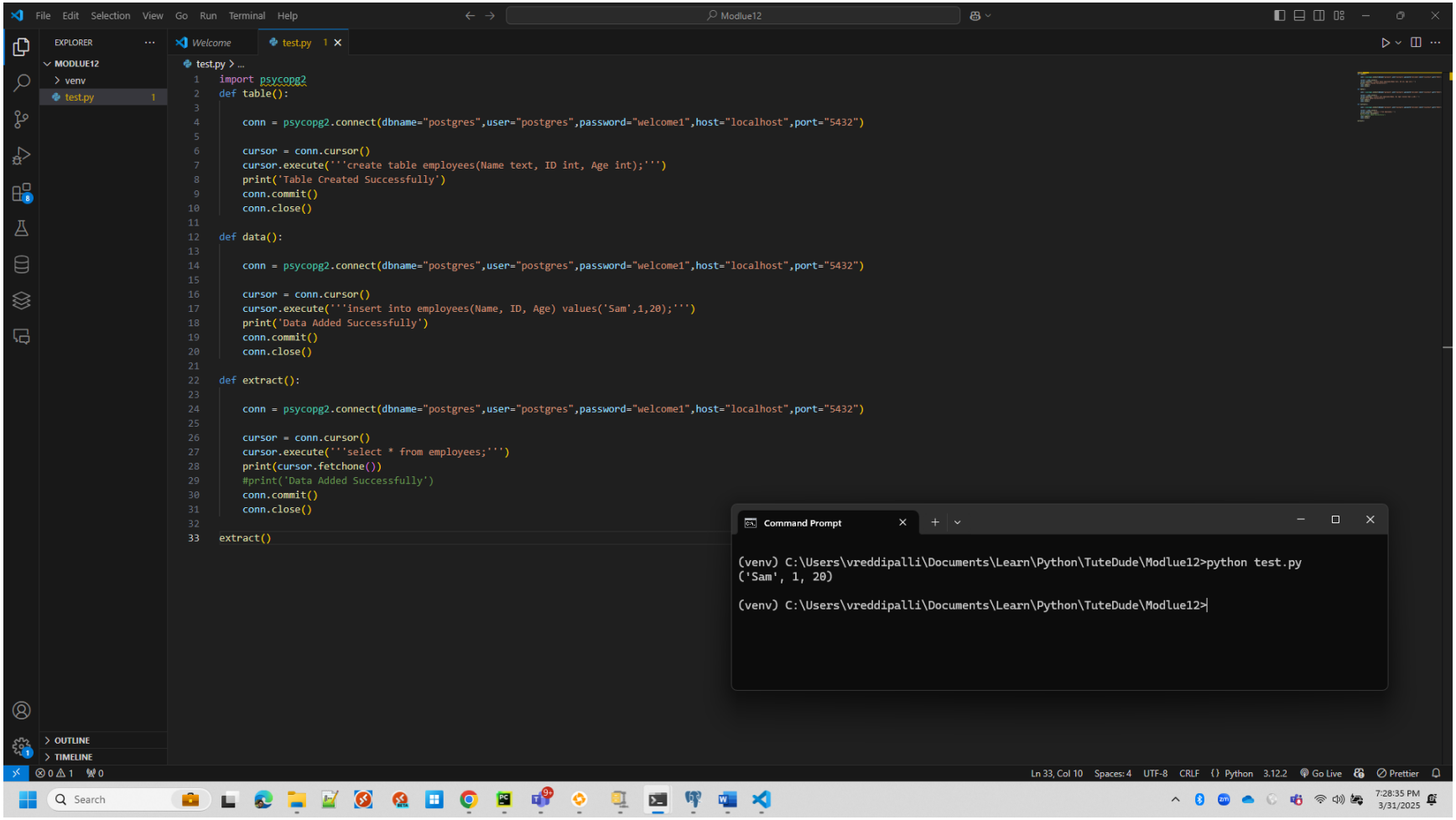
```python
import psycopg2

def extract():
```

```
    conn =
psycopg2.connect(dbname="postgres",user="postgres",password="welcome1",host="localhost",port="5432")

    cursor = conn.cursor()
    cursor.execute('''select * from employees;''')
    print(cursor.fetchone())
    #print('Data Added Successfully')
    conn.commit()
    conn.close()

extract()
```



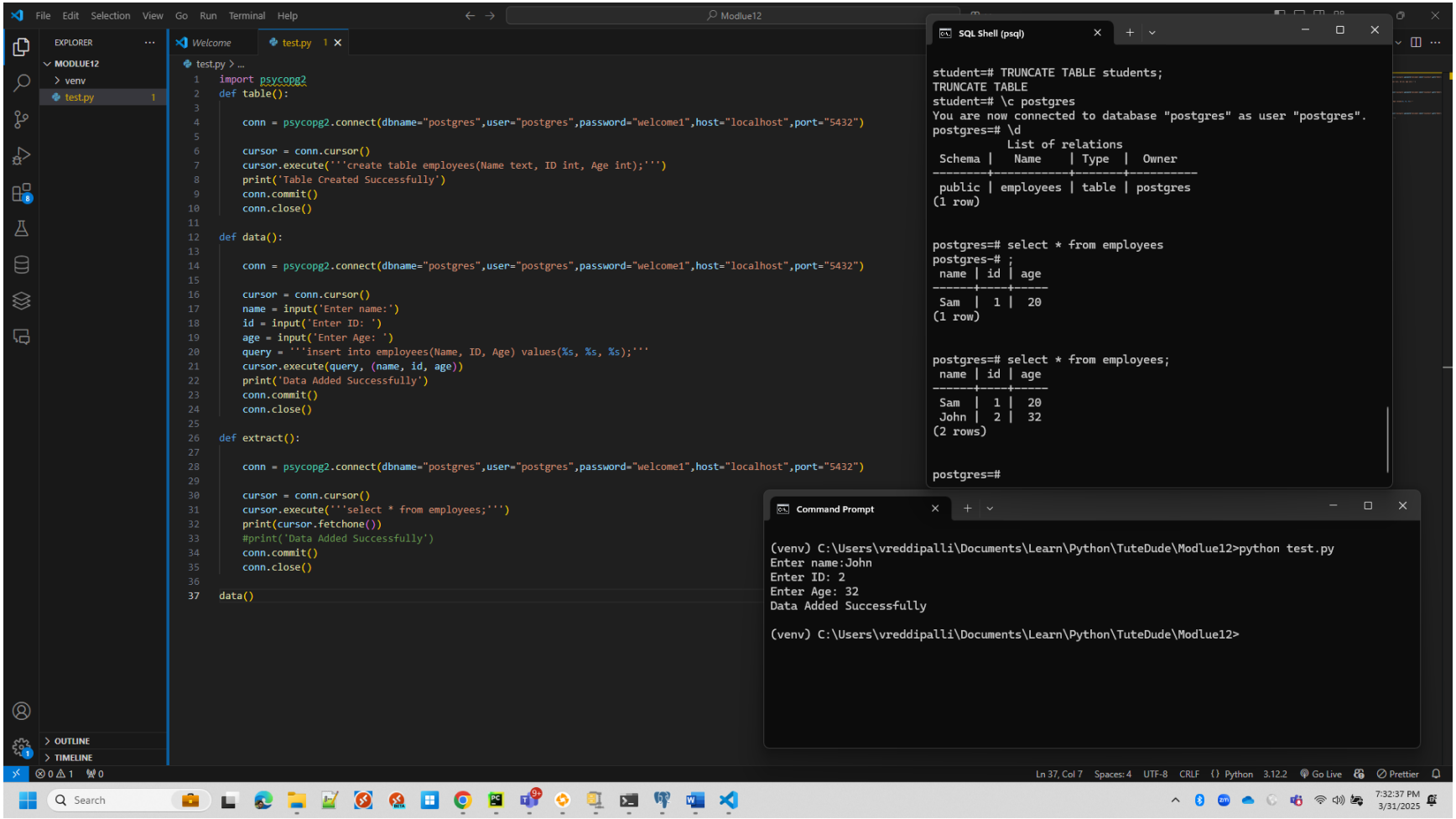
15- Insert into table using user input.

```
import psycopg2
def data():
```

```
    conn =
psycopg2.connect(dbname="postgres",user="postgres",password="welcome1",host="localhost",port="5432")

    cursor = conn.cursor()
    name = input('Enter name:')
    id = input('Enter ID: ')
    age = input('Enter Age: ')
    query = '''insert into employees(Name, ID, Age) values(%s, %s, %s);'''
    cursor.execute(query, (name, id, age))
    print('Data Added Successfully')
    conn.commit()
    conn.close()


data()
```


File Edit Selection View Go Run Terminal Help
Modlue12
EXPLORER
MODLUE12
venv
test.py
Welcome
test.py
test.py > ...
import psycopg2
def table():
conn = psycopg2.connect(dbname="postgres",user="postgres",password="welcome1",host="localhost",port="5432")
cursor = conn.cursor()
cursor.execute('''create table employees(Name text, ID int, Age int);''')
print('Table Created Successfully')
conn.commit()
conn.close()
def data():
conn = psycopg2.connect(dbname="postgres",user="postgres",password="welcome1",host="localhost",port="5432")
cursor = conn.cursor()
name = input('Enter name:')
id = input('Enter ID: ')
age = input('Enter Age: ')
query = '''insert into employees(Name, ID, Age) values(%s, %s, %s);'''
cursor.execute(query, (name, id, age))
print('Data Added Successfully')
conn.commit()
conn.close()
def extract():
conn = psycopg2.connect(dbname="postgres",user="postgres",password="welcome1",host="localhost",port="5432")
cursor = conn.cursor()
cursor.execute('''select * from employees;''')
print(cursor.fetchone())
#print('Data Added Successfully')
conn.commit()
conn.close()
data()
OUTLINE
TIMELINE
Ln 37, Col 7 Spaces: 4 UTF-8 CRLF Python 3.12.2 Go Live Prettier
SQL Shell (psql)
student=# TRUNCATE TABLE students;
TRUNCATE TABLE
student=# \c postgres
You are now connected to database "postgres" as user "postgres".
postgres=# \d
List of relations
Schema | Name | Type | Owner
public | employees | table | postgres
(1 row)
postgres=# select * from employees
postgres-# ;
name | id | age
Sam | 1 | 20
(1 row)
postgres=# select * from employees;
name | id | age
Sam | 1 | 20
John | 2 | 32
(2 rows)
postgres=#
Command Prompt
(venv) C:\Users\vreddipalli\Documents\Learn\Python\TuteDude\Modlue12>python test.py
Enter name:John
Enter ID: 2
Enter Age: 32
Data Added Successfully
(venv) C:\Users\vreddipalli\Documents\Learn\Python\TuteDude\Modlue12>
Search
7:32:37 PM
3/31/2025