



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/postgres +
template1	postgres	UTF8	libc	English_India.1252	English_India.1252			postgres=CTc/postgres +
								=c/postgres +
								postgres=CTc/postgres

(4 rows)

postgres=# create database test;  
CREATE DATABASE  
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/postgres +
template1	postgres	UTF8	libc	English_India.1252	English_India.1252			postgres=CTc/postgres +
								=c/postgres +
								postgres=CTc/postgres
test	postgres	UTF8	libc	English_India.1252	English_India.1252			

(5 rows)

postgres=# drop database test;  
DROP DATABASE  
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/postgres +
template1	postgres	UTF8	libc	English_India.1252	English_India.1252			postgres=CTc/postgres +
								=c/postgres +
								postgres=CTc/postgres

(4 rows)

postgres=# |

```
postgres=# Create Database Student;
CREATE DATABASE
postgres=# \c student
You are now connected to database "student" as user "postgres".
student=# CREATE TABLE students (Name text, age int, number int, class int);
CREATE TABLE
student=# \d
           List of relations
Schema |   Name   | Type  | Owner
-----+-----+-----+-----
public | students | table | postgres
(1 row)
```

```
student=# INSERT INTO students (Name, age, number, class) Values ("Ram", 12, 75, 08):
student=# ;
ERROR:  syntax error at or near ":"
LINE 1: ...dents (Name, age, number, class) Values ("Ram", 12, 75, 08):
                                         ^
```

```
student=# INSERT INTO students (Name, age, number, class) Values ("Ram", 12, 75, 08);
ERROR:  column "Ram" does not exist
LINE 1: ... INTO students (Name, age, number, class) Values ("Ram", 12,...
                                         ^
```

```
student=# INSERT INTO students (Name, age, number, class) Values ('Ram', 12, 75, 08);
INSERT 0 1
student=# INSERT INTO students (Name, age, number, class) Values ('Lakhan', 15, 65, 05);
INSERT 0 1
```

```
student=# \d
           List of relations
Schema |   Name   | Type  | Owner
-----+-----+-----+-----
public | students | table | postgres
(1 row)
```



Schema	Name	Type	Owner
public	students	table	postgres

(1 row)

```
student=# Select * students;  
ERROR: syntax error at or near "students"  
LINE 1: Select * students;  
                ^
```

```
student=# Select * From students;
```

name	age	number	class
Ram	12	75	8
Lakhan	15	65	5

(2 rows)

```
student=# Select name From students;
```

name
Ram
Lakhan

(2 rows)

```
student=# Select class From students;
```

class
8
5

(2 rows)

student=#

```
student=# Select * From students;
 name | age | number | class
-----+-----+-----+-----
 Ram   |  12 |     75 |     8
Lakhan |  15 |     65 |     5
(2 rows)
```

```
student=# Select name From students;
 name
-----
 Ram
Lakhan
(2 rows)
```

```
student=# Select class From students;
 class
-----
     8
     5
(2 rows)
```

```
student=# Select * From students WHERE class=5:
student-# ;
ERROR:  syntax error at or near ":"
LINE 1: Select * From students WHERE class=5:
                                         ^
```

```
student=# Select * From students WHERE class=5;
 name | age | number | class
-----+-----+-----+-----
Lakhan |  15 |     65 |     5
(1 row)
```

LINE 1: Select \* From students WHERE class=5:

^

student=# Select \* From students WHERE class=5;

name	age	number	class
------	-----	--------	-------

Lakhan	15	65	5
--------	----	----	---

(1 row)

student=# Select name From students WHERE class=5;

name
------

Lakhan

(1 row)

student=# Select number From students WHERE class=8;

number
--------

75

(1 row)

student=# Select class From students WHERE Name=Ram;

ERROR: column "ram" does not exist

LINE 1: Select class From students WHERE Name=Ram;

^

student=# Select class From students WHERE Name="Ram";

ERROR: column "Ram" does not exist

LINE 1: Select class From students WHERE Name="Ram";

^

student=# Select class From students WHERE Name='Ram';

class
-------

8

(1 row)

student=# |



Terc

number  
-----  
75  
(1 row)

student=# Select class From students WHERE Name=Ram;  
ERROR: column "ram" does not exist  
LINE 1: Select class From students WHERE Name=Ram;  
^

student=# Select class From students WHERE Name="Ram";  
ERROR: column "Ram" does not exist  
LINE 1: Select class From students WHERE Name="Ram";  
^

student=# Select class From students WHERE Name='Ram';  
class  
-----  
8  
(1 row)

student=# TRUNCATE TABLE students  
student-# ;  
TRUNCATE TABLE  
student=# \d

List of relations

Schema	Name	Type	Owner
public	students	table	postgres

(1 row)

student=# select \* from students;  
name | age | number | class  
-----+-----+-----+-----  
(0 rows)

student=# .|





Microsoft Windows [Version 10.0.22621.4317]  
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C:\Users\shiva>cd desktop

C:\Users\shiva\Desktop>cd visual studio

C:\Users\shiva\Desktop\Visual studio>cd env

C:\Users\shiva\Desktop\Visual studio\env>cd scripts

C:\Users\shiva\Desktop\Visual studio\env\Scripts>activate

(env) C:\Users\shiva\Desktop\Visual studio\env\Scripts>cd..

(env) C:\Users\shiva\Desktop\Visual studio\env>cd..

(env) C:\Users\shiva\Desktop\Visual studio>python test.py  
Python

(env) C:\Users\shiva\Desktop\Visual studio>deactivate  
C:\Users\shiva\Desktop\Visual studio>

Microsoft Windows [Version 10.0.22621.4317]  
(c) Microsoft Corporation. All rights reserved.

C:\Users\shiva>cd desktop

C:\Users\shiva\Desktop>cd visual studio

C:\Users\shiva\Desktop\Visual studio>cd env

C:\Users\shiva\Desktop\Visual studio\env>cd scripts

C:\Users\shiva\Desktop\Visual studio\env\Scripts>activate

(env) C:\Users\shiva\Desktop\Visual studio\env\Scripts>cd..

(env) C:\Users\shiva\Desktop\Visual studio\env>cd..

(env) C:\Users\shiva\Desktop\Visual studio>python test.py  
Python

(env) C:\Users\shiva\Desktop\Visual studio>deactivate

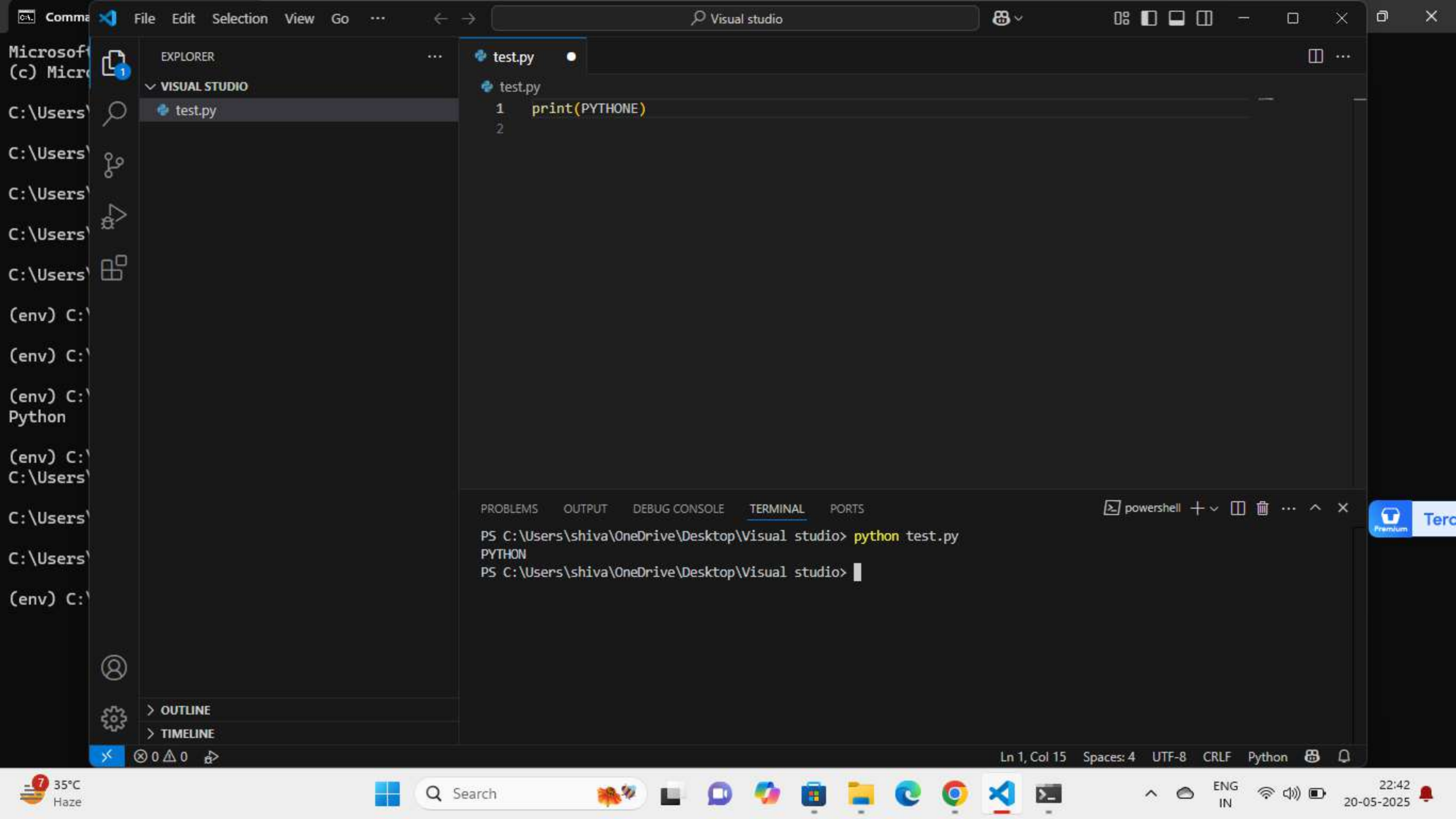
C:\Users\shiva\Desktop\Visual studio>cd env

C:\Users\shiva\Desktop\Visual studio\env>cd scripts

C:\Users\shiva\Desktop\Visual studio\env\Scripts>activate

(env) C:\Users\shiva\Desktop\Visual studio\env\Scripts>|





```

copying lib\extensions.py -> build\lib.win-amd64-cpython-313\psycpg2
copying lib\extras.py -> build\lib.win-amd64-cpython-313\psycpg2
copying lib\pool.py -> build\lib.win-amd64-cpython-313\psycpg2
copying lib\sql.py -> build\lib.win-amd64-cpython-313\psycpg2
copying lib\tz.py -> build\lib.win-amd64-cpython-313\psycpg2
copying lib\_ipaddress.py -> build\lib.win-amd64-cpython-313\psycpg2
copying lib\_json.py -> build\lib.win-amd64-cpython-313\psycpg2
copying lib\_lru_cache.py -> build\lib.win-amd64-cpython-313\psycpg2
copying lib\_range.py -> build\lib.win-amd64-cpython-313\psycpg2
copying lib\__init__.py -> build\lib.win-amd64-cpython-313\psycpg2
running build_ext
building 'psycpg2._psycpg2' extension
error: Microsoft Visual C++ 14.0 or greater is required. Get it with "Microsoft C++ Build Tools": https://visualstudio.microsoft.com/visual-cp
p-build-tools/
[end of output]

```

**note:** This error originates from a subprocess, and is likely not a problem with pip.

**ERROR: Failed building wheel for psycpg2**

Failed to build psycpg2

**ERROR: Failed to build installable wheels for some pyproject.toml based projects (psycpg2)**

```

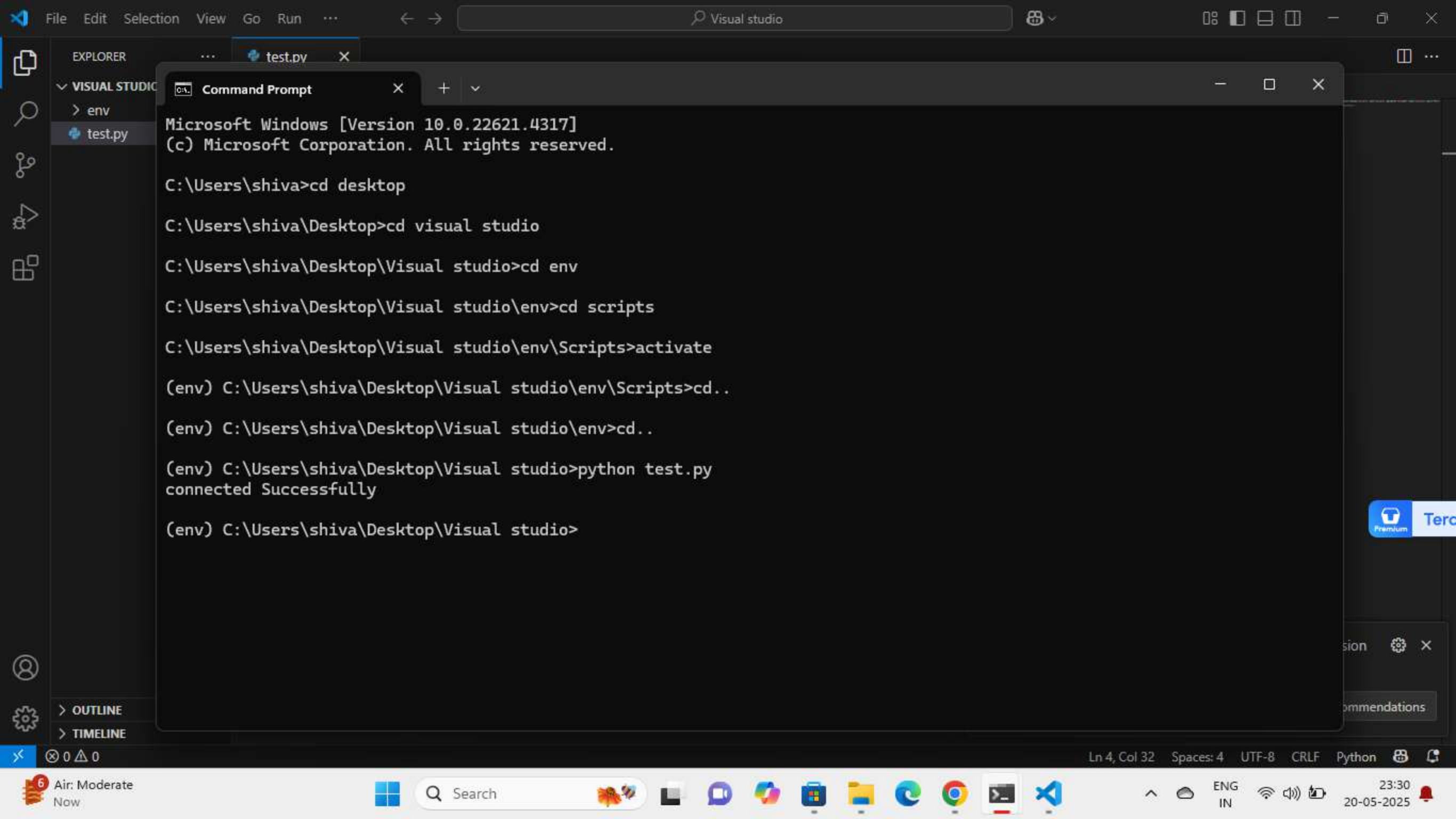
(env) C:\Users\shiva\Desktop\Visual studio>pip install psycpg2==2.9.10
Collecting psycpg2==2.9.10
  Downloading psycpg2-2.9.10-cp313-cp313-win_amd64.whl.metadata (4.8 kB)
  Downloading psycpg2-2.9.10-cp313-cp313-win_amd64.whl (2.6 MB)
    

2.6/2.6 MB 4.2 MB/s eta 0:00:00

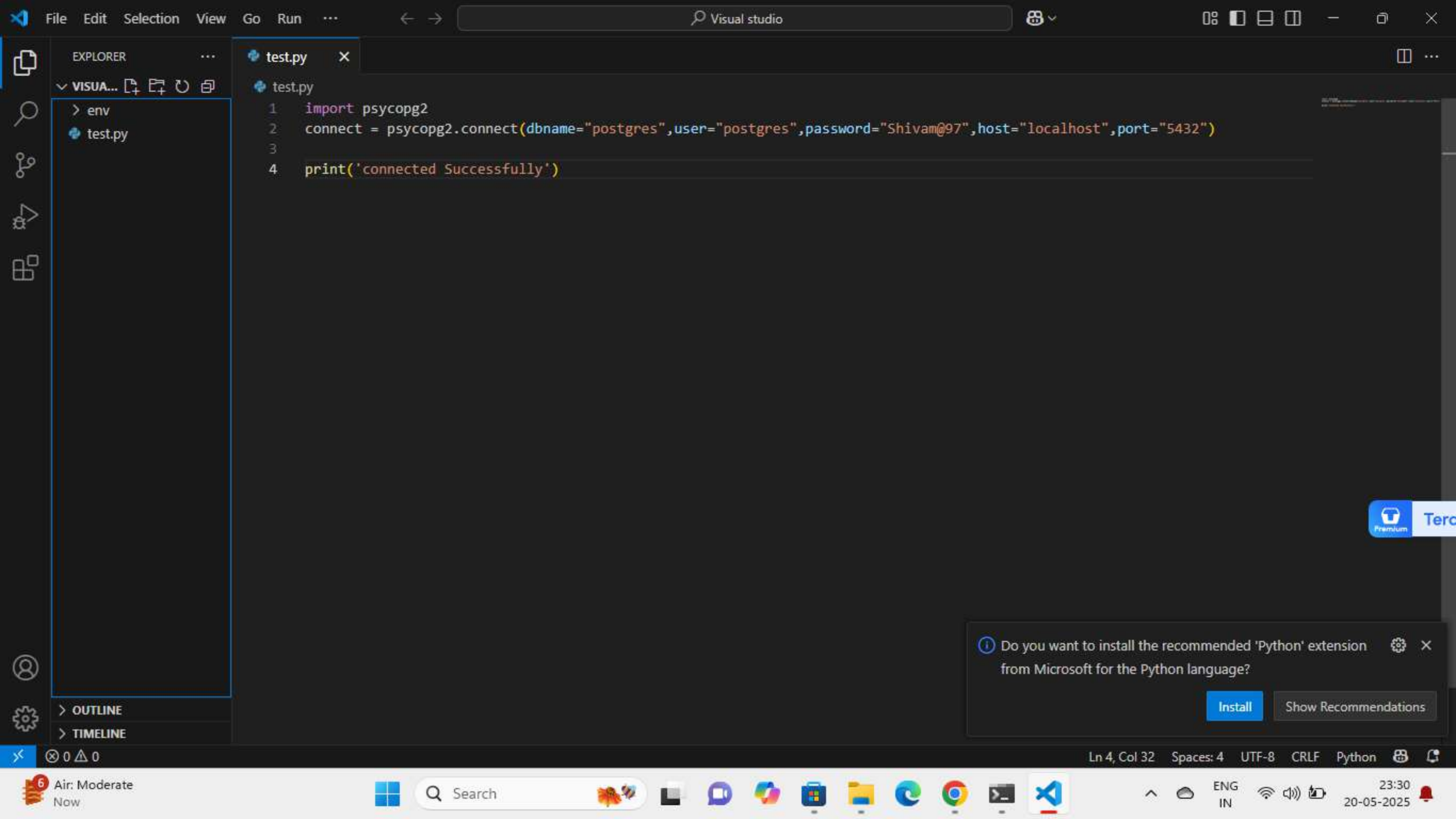

Installing collected packages: psycpg2
Successfully installed psycpg2-2.9.10

```

(env) C:\Users\shiva\Desktop\Visual studio>







EXPLORER

VISUA...

> env

test.py

test.py

test.py

```
1 import psycopg2
2 connect = psycopg2.connect(dbname="postgres",user="postgres",password="Shivam@97",host="localhost",port="5432")
3
4 print('connected Successfully')
```

> OUTLINE

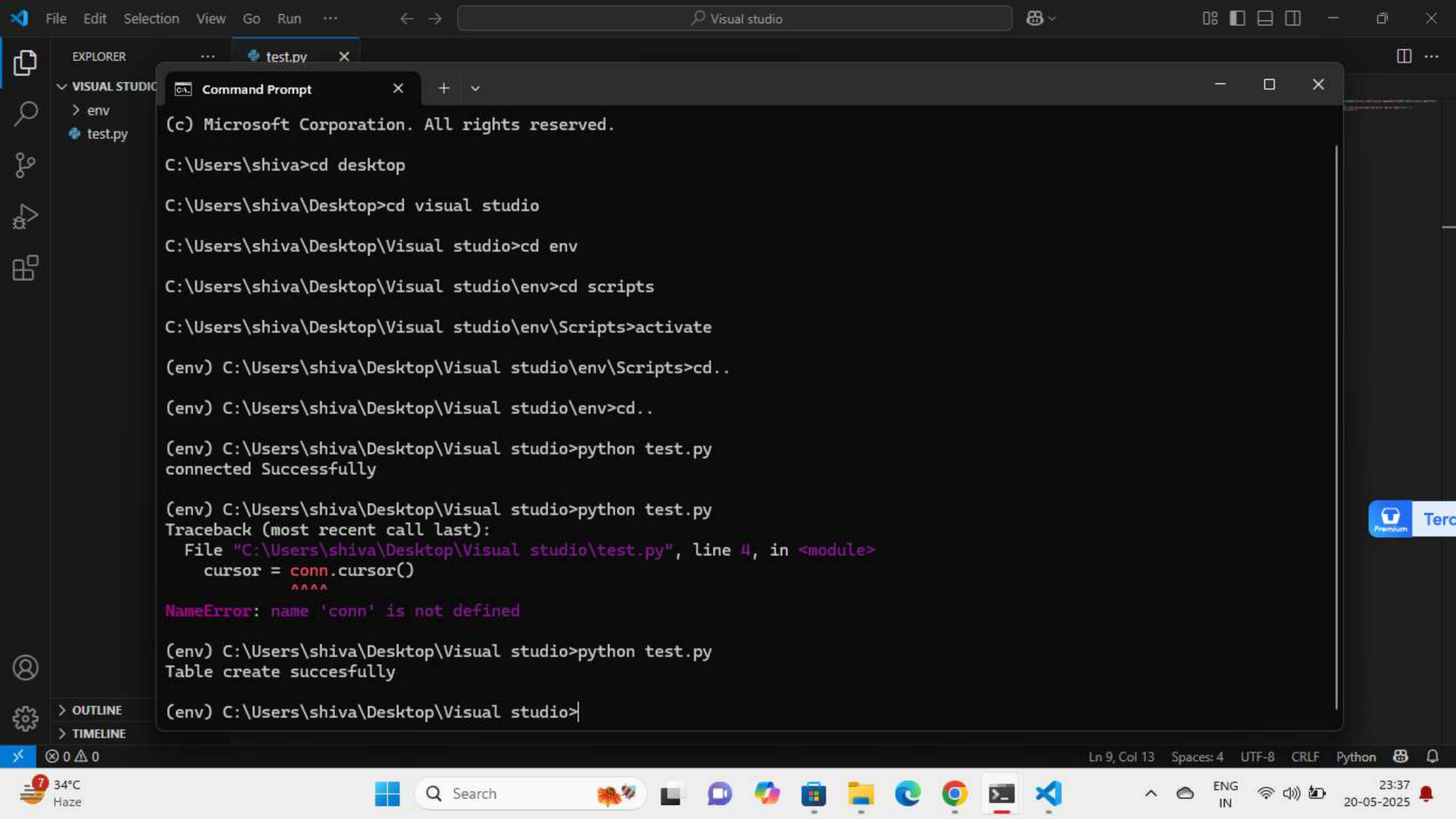
> TIMELINE

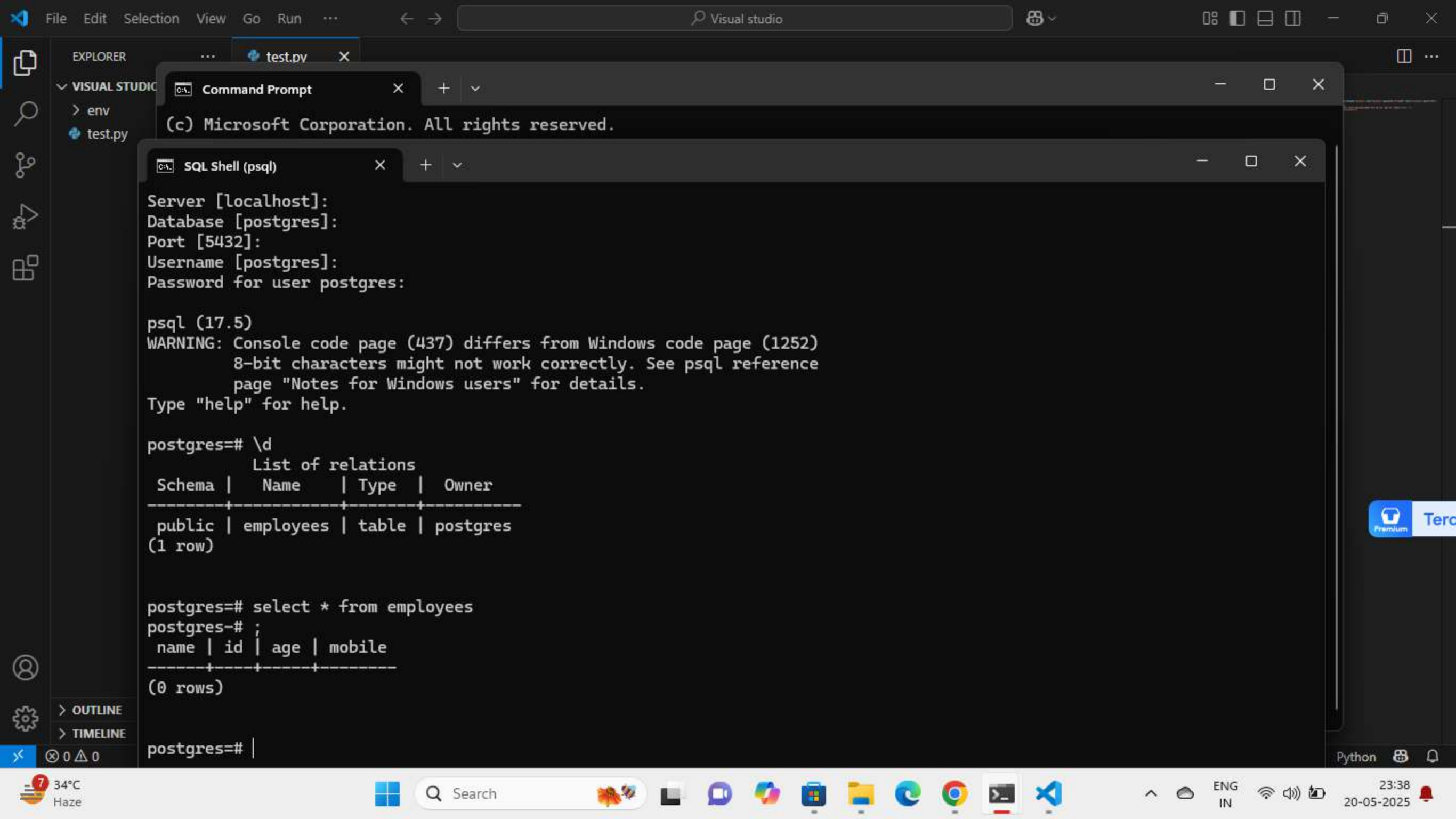
Do you want to install the recommended 'Python' extension from Microsoft for the Python language?

Install

Show Recommendations

Ln 4, Col 32 Spaces: 4 UTF-8 CRLF Python





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SQL Shell (psql)

Server [localhost]:  
Database [postgres]:  
Port [5432]:  
Username [postgres]:  
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=# \d

List of relations

Schema	Name	Type	Owner
public	employees	table	postgres

(1 row)

postgres=# select \* from employees

postgres=# ;

name	id	age	mobile
------	----	-----	--------

(0 rows)

postgres=#



EXPLORER

VISUAL STUDIO

env

test.py

test.py

test.py

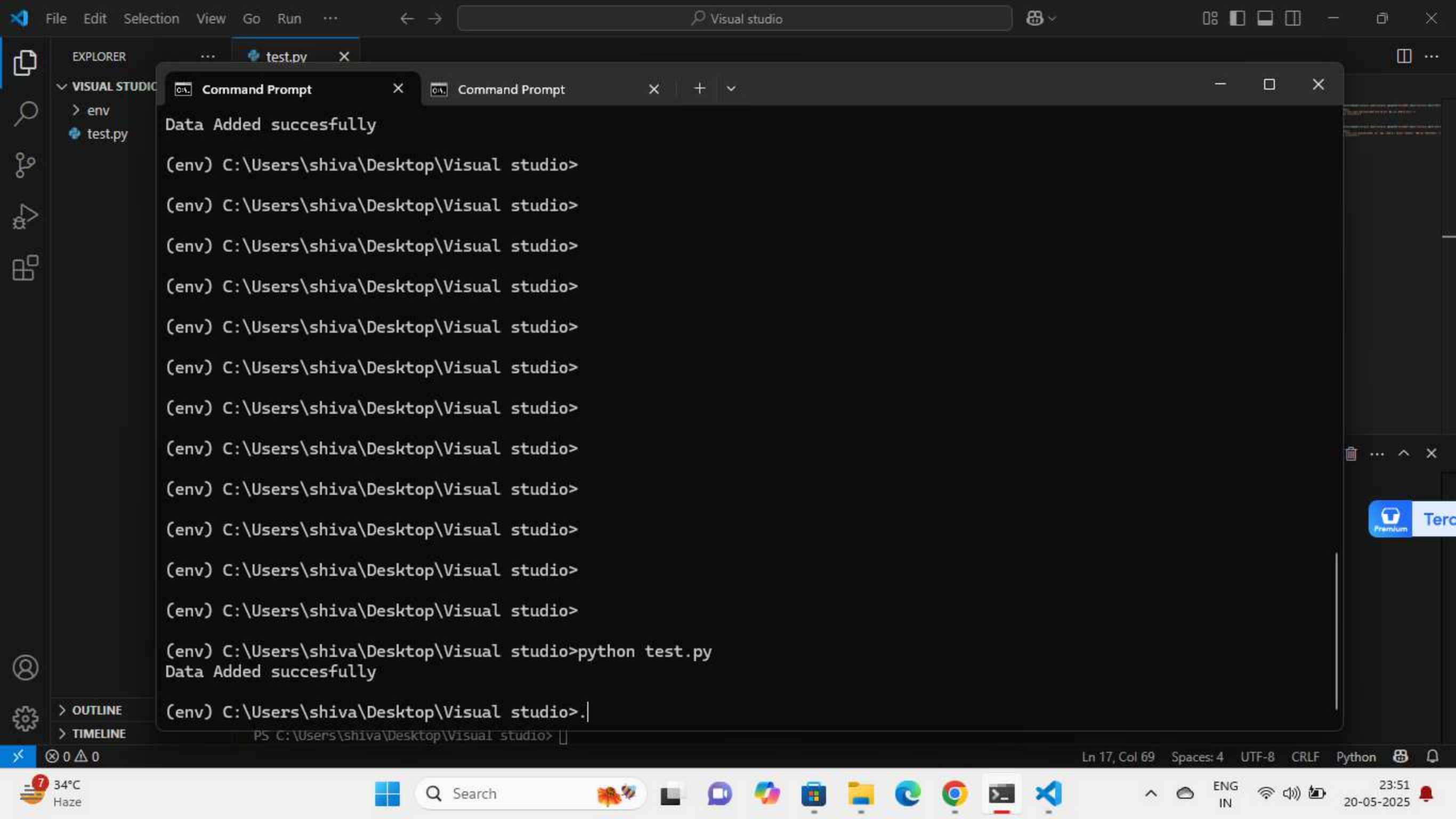
```

1 import psycopg2
2 def table():
3
4     conn = psycopg2.connect(dbname="postgres",user="postgres",password="Shivam@97",host="localhost",port="5432")
5
6     cursor = conn.cursor()
7     cursor.execute('create table employees(Name Text,ID int, Age int, Mobile int);')
8     print('Table create succesfully')
9
10    conn.commit()
11    conn.close()
12
13 def Data():
14     conn = psycopg2.connect(dbname="postgres",user="postgres",password="Shivam@97",host="localhost",port="5432")
15
16     cursor = conn.cursor()
17     cursor.execute('insert into employees(Name Text,ID int, Age int, Mobile int) values ('Ramesh', 1001,29, 056212345);')
18     print('Data Added succesfully')
19
20    conn.commit()
21    conn.close()

```

OUTLINE

TIMELINE



Command Prompt

Command Prompt

Data Added succesfully

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>python test.py

Data Added succesfully

(env) C:\Users\shiva\Desktop\Visual studio>.

PS C:\Users\shiva\Desktop\Visual studio>

Ln 17, Col 69 Spaces: 4 UTF-8 CRLF Python

EXPLORER

VISUAL STUDIO

env

test.py

test.py

test.py

```

1  import psycopg2
2  def table():
3
4      conn = psycopg2.connect(dbname="postgres",user="postgres",password="Shivam@97",host="localhost",port="5432")
5
6      cursor = conn.cursor()
7      cursor.execute(''create table employees(Name Text,ID int, Age int, Mobile int);'')
8      print('Table create succesfully')
9
10     conn.commit()
11     conn.close()
12
13 def data():
14     conn = psycopg2.connect(dbname="postgres",user="postgres",password="Shivam@97",host="localhost",port="5432")
15
16     cursor = conn.cursor()
17     cursor.execute(''insert into employees(Name ,ID , Age , Mobile ) values ('Ramesh', 1001,29, 056212345);'')
18     print('Data Added succesfully')
19
20     conn.commit()
21     conn.close()
22
23 data()
```

Ln 17, Col 69 Spaces: 4 UTF-8 CRLF {} Python

34°C Haze
Search
23:51 20-05-2025

LINE 2: ;

^

postgres=# TRUNCATE TABLE employees

postgres=# ;

TRUNCATE TABLE

postgres=# \l

List of databases								
Name	Owner	Encoding	Locale Provider	Collate	Ctype	Locale	ICU Rules	Access privileges
postgres	postgres	UTF8	libc	English_India.1252	English_India.1252			
student	postgres	UTF8	libc	English_India.1252	English_India.1252			
template0	postgres	UTF8	libc	English_India.1252	English_India.1252			=c/postgres +
template1	postgres	UTF8	libc	English_India.1252	English_India.1252			postgres=CTc/postgres +
								=c/postgres +
								postgres=CTc/postgres

(4 rows)

postgres=# \d

List of relations			
Schema	Name	Type	Owner
public	employees	table	postgres

(1 row)

postgres=# select \* from employees

postgres=# ;

name	id	age	mobile
Ramesh	1001	29	56212345

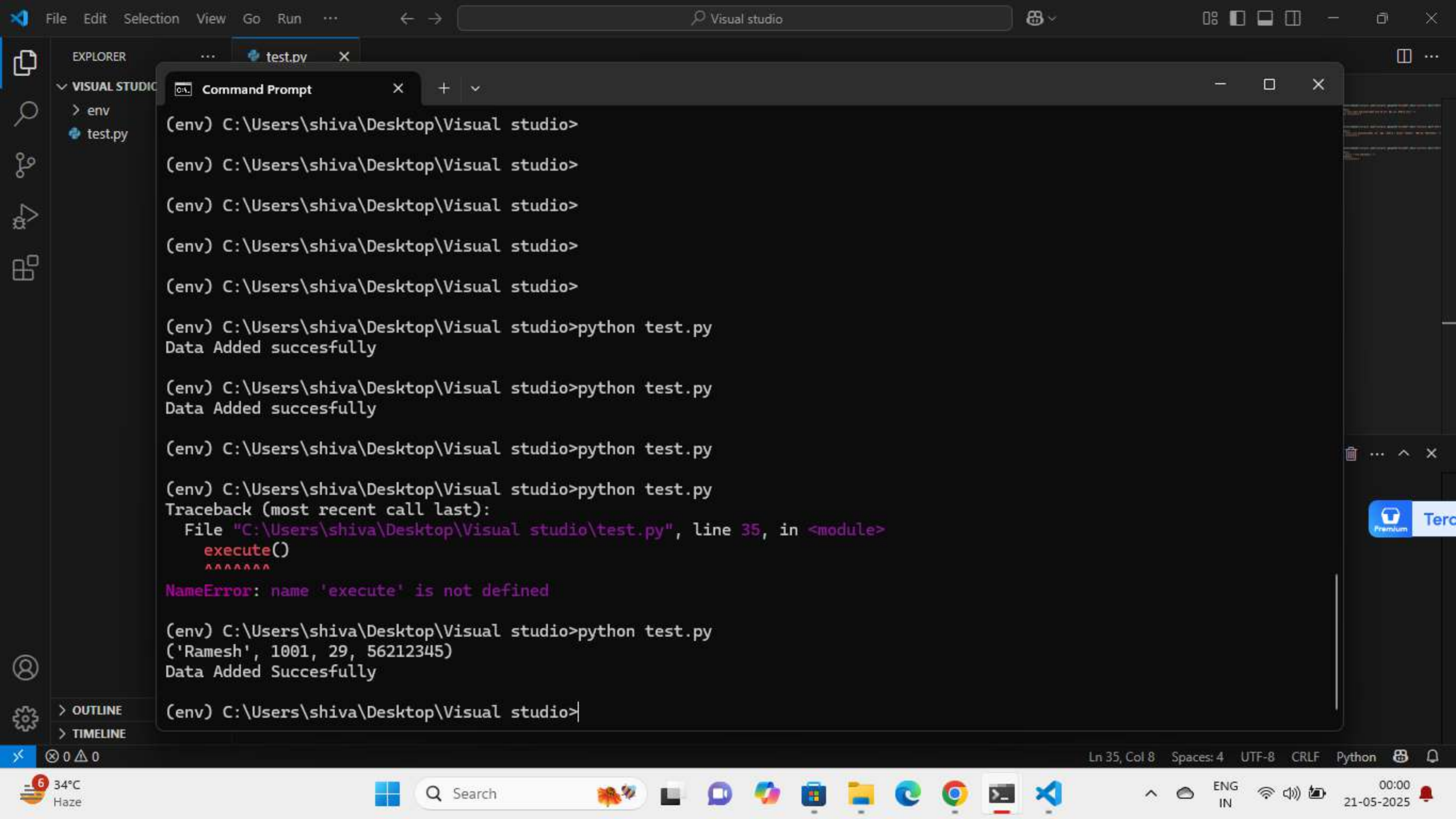
(1 row)

postgres=#

 Premium

Terc





SQL Shell (psql)

LINE 2: ;

postgres=# TRUNC

postgres=# ;

TRUNCATE TABLE

postgres=# \l

Name	O
postgres	pos
student	pos
template0	pos
template1	pos

(4 rows)

postgres=# \d

Schema	List
public	employ

(1 row)

postgres=# select

postgres=# ;

name	id
Ramesh	1001

(1 row)

postgres=#

Command Prompt

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>python test.py

Data Added succesfully

(env) C:\Users\shiva\Desktop\Visual studio>python test.py

Data Added succesfully

(env) C:\Users\shiva\Desktop\Visual studio>python test.py

(env) C:\Users\shiva\Desktop\Visual studio>python test.py

Traceback (most recent call last):

File "C:\Users\shiva\Desktop\Visual studio\test.py", line 35, in <module>

execute()

^^^^^^

NameError: name 'execute' is not defined

(env) C:\Users\shiva\Desktop\Visual studio>python test.py

('Ramesh', 1001, 29, 56212345)

Data Added Succesfully

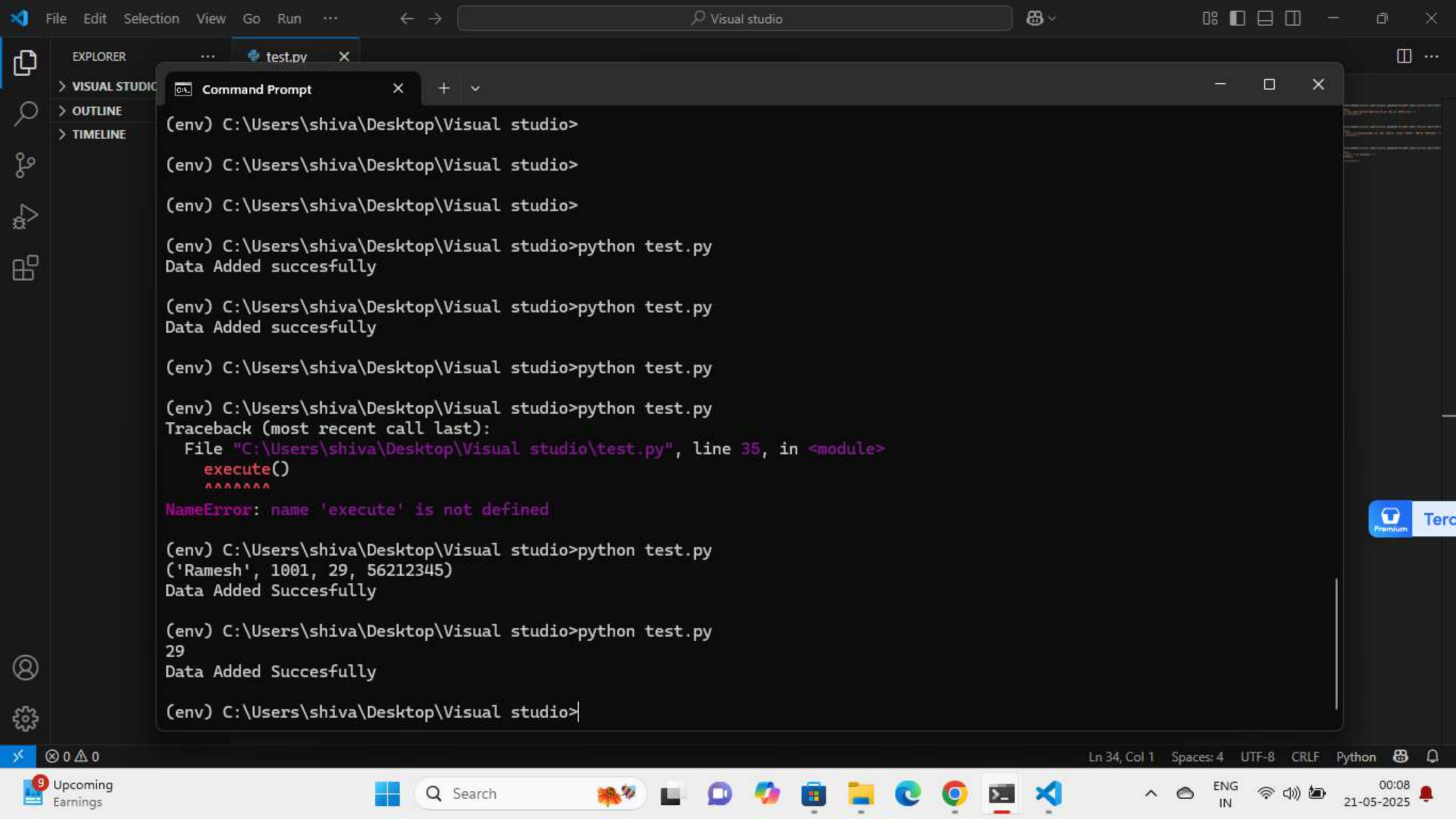
(env) C:\Users\shiva\Desktop\Visual studio>

9 Finance headline India reported 0...

Search

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00:07 21-05-2025



```
(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>

(env) C:\Users\shiva\Desktop\Visual studio>python test.py
Data Added succesfully

(env) C:\Users\shiva\Desktop\Visual studio>python test.py
Data Added succesfully

(env) C:\Users\shiva\Desktop\Visual studio>python test.py

(env) C:\Users\shiva\Desktop\Visual studio>python test.py
Traceback (most recent call last):
  File "C:\Users\shiva\Desktop\Visual studio\test.py", line 35, in <module>
    execute()
    ^^^^^^^
NameError: name 'execute' is not defined

(env) C:\Users\shiva\Desktop\Visual studio>python test.py
('Ramesh', 1001, 29, 56212345)
Data Added Successfully

(env) C:\Users\shiva\Desktop\Visual studio>python test.py
29
Data Added Successfully

(env) C:\Users\shiva\Desktop\Visual studio>
```









 **SQL Shell (psql)**

```
Server [localhost]:
Database [postgres]:
Port [5432]:
Username [postgres]:
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=# \d
```

## List of relations

Schema	Name	Type	Owner
public	employees	table	postgres

(1 row)

```
postgres=# select * from employees;
```

name	id	age	mobile
ram	1452	52	146466313
Ramesh	10002	65	154541313

(2 rows)

```
postgres=#
```

EXPLORER

- VISUA...
- env
  - Lib
  - Scripts
  - .gitignore
  - CACHEDIR.TAG
  - pyvenv.cfg
  - test.py
- OUTLINE
- TIMELINE

```
test.py
1 import psycopg2
2 def table():
3
4     conn = psycopg2.connect(dbname="postgres",user="postgres",password="Shivam@97",host="localhost",port="5432")
5
6     cursor = conn.cursor()
7     cursor.execute('create table employees(Name Text,ID int, Age int, Mobile int);')
8     print('Table create succesfully')
9
10    conn.commit()
11    conn.close()
12
13 def data():
14     conn = psycopg2.connect(dbname="postgres",user="postgres",password="Shivam@97",host="localhost",port="5432")
15
16     cursor = conn.cursor()
17
18     Name = input('Enter Name : ')
19     ID = input('Enter ID : ')
20     Age = input('Enter Age : ')
21     Mobile = input('Enter Mobile : ')
22
23     query = 'insert into employees(Name,ID,Age,Mobile ) values (%s,%s,%s,%s);'
24     cursor.execute(query,(Name,ID,Age,Mobile))
25
26     print('Data Added succesfully')
27
28     conn.commit()
29     conn.close()
30
31 data()
32
```