

```
1 TASK 1
2
3 num = int(input("Enter an integer: "))
4
5
6 if num % 2 == 0:
7     print(num, "is an Even number.")
8 else:
9     print(num, "is an Odd number.")
10
11
12
13 TASK 2
14
15 total_sum = 0
16
17
18 for num in range(1, 51):
19     total_sum += num
20
21
22 print("The sum of numbers from 1 to 50 is:", total_sum)
23
```

```
1 TASK 1
2
3 > def factorial(n): ...
4
5
6 number = 5
7 result = factorial(number)
8
9
10 print("Factorial of", number, "is:", result)
11
12
13 TASK 2
14
15
16 import math
17
18
19
20 num = float(input("Enter a number: "))
21
22
23 square_root = math.sqrt(num)
24 natural_log = math.log(num)
25 sine_value = math.sin(num)
26
27
28 print("Square root of", num, "is:", square_root)
29 print("Natural logarithm of", num, "is:", natural_log)
30 print("Sine of", num, "is:", sine_value)
31
32
```

```
1 TASK 1
2
3 try:
4     with open("sample.txt", "r") as file:
5         for line in file:
6             print(line.strip())
7 except FileNotFoundError:
8     print("Error: The file 'sample.txt' does not exist.")
9
10
11 TASK 2
12
13
14 data = input("Enter a value: ")
15
16 with open("output.txt", "w") as file:
17     file.write(data + "\n")
18
19 with open("output.txt", "a") as file:
20     file.write("Appended data\n")
21
22
23 with open("output.txt", "r") as file:
24     print(file.read())
25
```

```
1 TASK 1
2
3 > student_marks = { ...
9
10
11 name = input("Enter the student's name: ")
12
13
14 ✓ if name in student_marks:
15     print(f"Marks of {name}: {student_marks[name]}")
16 ✓ else:
17     print("Student name not found.")
18
19
20 ⚡
21 TASK 2
22
23 numbers = list(range(1, 11))
24
25 first_five = numbers[:5]
26
27 reversed_list = first_five[::-1]
28
29 print("Original list:", numbers)
```

```
1 TASK 1
2
3 > student_marks = { ...
4
5
6
7
8
9
10
11 name = input("Enter the student's name: ")
12
13
14 ✓ if name in student_marks:
15     print(f"Marks of {name}: {student_marks[name]}")
16 ✓ else:
17     print("Student name not found.")
18
19
20💡
21 TASK 2
22
23 numbers = list(range(1, 11))
24
25 first_five = numbers[:5]
26
27 reversed_list = first_five[::-1]
28
29 print("Original list:", numbers)
30 print("Extracted list:", first_five)
31 print("Reversed list:", reversed_list)
32
33
```

```
import tkinter as tk

# Create main window
root = tk.Tk()
root.title("Calculator")
root.geometry("300x400")
root.resizable(False, False)

# Entry widget to display input/output
expression = ""
entry = tk.Entry(root, font=("Arial", 20), borderwidth=5, relief=tk.RIDGE, justify="right")
entry.pack(fill="both", ipadx=8, ipady=15, padx=10, pady=10)

# Function to update expression
def press(value):
    global expression
    expression += str(value)
    entry.delete(0, tk.END)
    entry.insert(tk.END, expression)

# Function to calculate result
def equal():
    global expression
    try:
        result = str(eval(expression))
        entry.delete(0, tk.END)
        entry.insert(tk.END, result)
        expression = result
    except:
        entry.delete(0, tk.END)
```

```
        except:
            entry.delete(0, tk.END)
            entry.insert(tk.END, "Error")
            expression = ""

# Function to clear input
def clear():
    global expression
    expression = ""
    entry.delete(0, tk.END)

# Button layout
buttons = [
    ('7', 0, 0), ('8', 0, 1), ('9', 0, 2), ('/', 0, 3),
    ('4', 1, 0), ('5', 1, 1), ('6', 1, 2), ('*', 1, 3),
    ('1', 2, 0), ('2', 2, 1), ('3', 2, 2), ('-', 2, 3),
    ('0', 3, 0), ('.', 3, 1), ('=', 3, 2), ('+', 3, 3)
]

frame = tk.Frame(root)
frame.pack()

for text, row, col in buttons:
    if text == '=':
        btn = tk.Button(frame, text=text, width=5, height=2, font=("Arial", 14),
                        command=equal)
```

```
        else:
            btn = tk.Button(frame, text=text, width=5, height=2, font=("Arial", 14),
                           command=Lambda t=text: press(t))
            btn.grid(row=row, column=col, padx=5, pady=5)

# Clear button
clear_btn = tk.Button(root, text="Clear", font=("Arial", 14),
                      command=clear)
clear_btn.pack(fill="x", padx=10, pady=10)

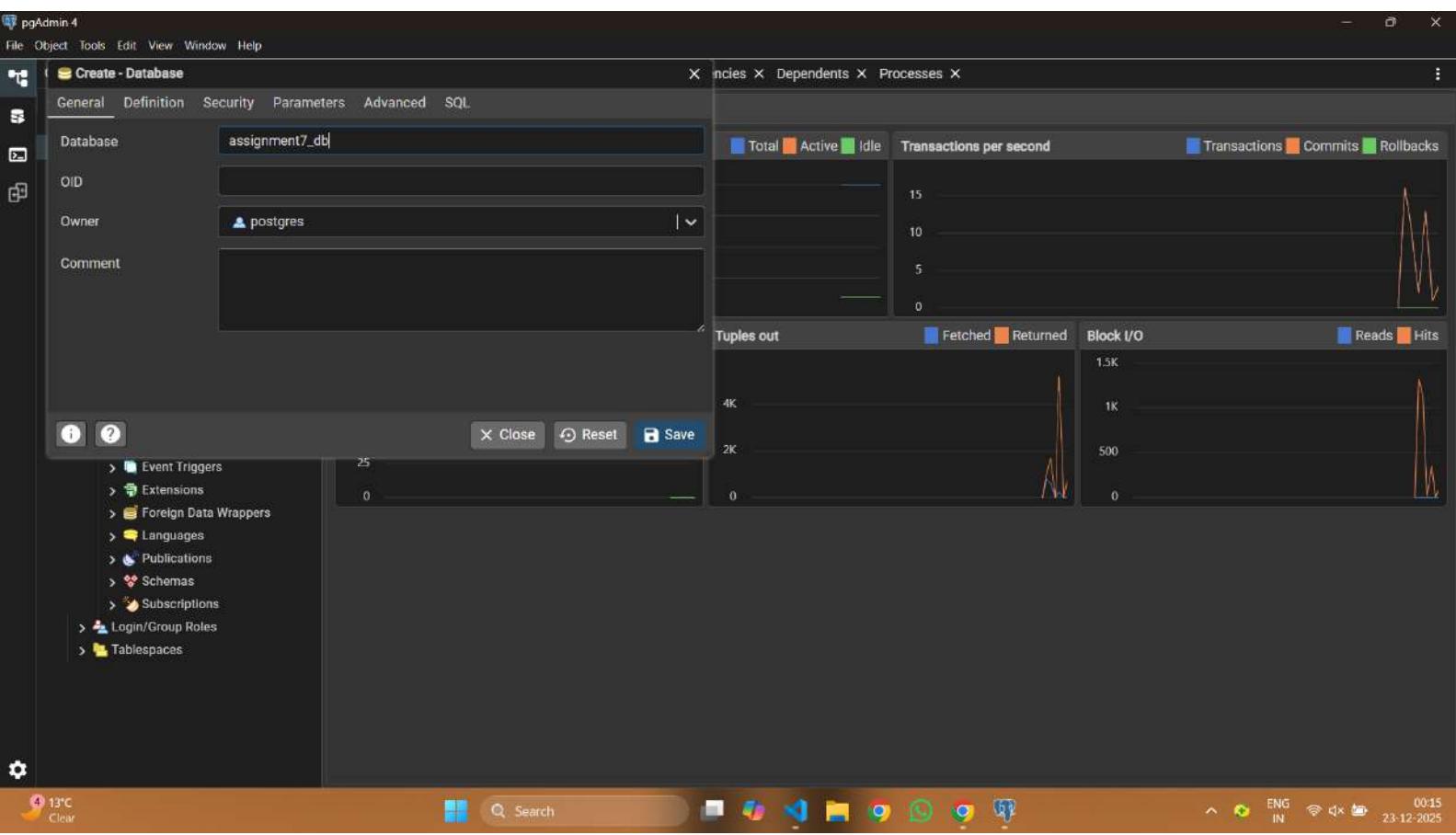
root.mainloop()
```

The screenshot shows a dark-themed code editor interface. At the top, there's a navigation bar with File, Edit, Selection, View, Go, Run, and other icons. A search bar contains the text "assignment 7". Below the navigation bar is a "Welcome" sidebar with sections for Start (New File..., Open File..., Open Folder..., Clone Git Repository..., Connect to..., Generate New Workspace...) and Walkthroughs (Org Browser, Connected Org, Learn the Fundamentals, Get Started with Python Development, Agentforce Vibes Extension). A large central area is a terminal window showing PowerShell output:

```
PS C:\Users\Ojasvi\OneDrive - Manipal University Jaipur\Pictures\Hangman Game in C\assignment 7>
PS C:\Users\Ojasvi\OneDrive - Manipal University Jaipur\Pictures\Hangman Game in C\assignment 7> pip install psycopg2-binary
>>
Collecting psycopg2-binary
Successfully installed psycopg2-binary-2.9.11

[notice] A new release of pip is available: 25.2 -> 25.3
[notice] To update, run: python.exe -m pip install --upgrade pip
PS C:\Users\Ojasvi\OneDrive - Manipal University Jaipur\Pictures\Hangman Game in C\assignment 7>
```

At the bottom, there's a status bar with icons for battery, temperature (13°C), weather (Mostly clear), language (ENG IN), network, and date (23-12-2025). On the right side, there's a "Build with Agent" panel with a message about AI responses being inaccurate, a "Generate Agent Instructions" button, and a "SUGGESTED ACTIONS" section with options like Build Workspace, Show Config, and Add Context... .



File Edit Selection View Go Run ... ← → Q assignment 7

```
import psycopg2
import psycopg2
1 import psycopg2
2
3 conn = psycopg2.connect(
4     database="assignment7_db",
5     user="postgres",
6     password="mahisinha",
7     host="localhost",
8     port="5432"
9 )
10
11 print("Connected")
12
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS + ⚡ ... X

PS C:\Users\Ojasvi\OneDrive - Manipal University Jaipur\Pictures\Hangman Game in C\assignment 7> ^C
PS C:\Users\Ojasvi\OneDrive - Manipal University Jaipur\Pictures\Hangman Game in C\assignment 7>
PS C:\Users\Ojasvi\OneDrive - Manipal University Jaipur\Pictures\Hangman Game in C\assignment 7> c;; cd 'c:\Users\Ojasvi\OneDrive - Manipal University Jaipur\Pictures\Hangman Game in C\assignment 7'; & 'C:\Users\Ojasvi\AppData\Local\Programs\Python\Python314\python.exe' 'c:\Users\Ojasvi\.vscode\extensions\ms-python.debugpy-2025.18.0-win32-x64\bundled\libs\debugpy\launcher' '54750' '--' 'c:\Users\Ojasvi\OneDrive - Manipal University Jaipur\Pictures\Hangman Game in C\assignment 7\import psycopg2.py'
Connected

Low visibility Now

Search

Ln 12, Col 1 Spaces: 4 UTF-8 CRLF { } Python Python 3.14 (64-bit) ENG IN 23-12-2025 00:18

The screenshot shows a code editor interface with a dark theme. On the left, there's a vertical toolbar with various icons. The main area displays a Python script:

```
import psycopg2
import psycopg2
conn = psycopg2.connect(
    database="assignment7_db",
    user="postgres",
    password="mahisinha",
    host="localhost",
    port="5432"
)
cur = conn.cursor()
cur.execute("""
CREATE TABLE IF NOT EXISTS students (
    id SERIAL PRIMARY KEY,
    name TEXT,
    age INT,
    marks INT
)
""")
conn.commit()
print("Table made")
cur.close()
conn.close()
```

The cursor is positioned at the end of the line starting with 'age INT,'. In the top right corner, there's a 'Build with Agent' panel with a message about AI responses being inaccurate and a 'Generate Agent Instructions' button. Below it, a 'SUGGESTED ACTIONS' section offers 'Build Workspace' and 'Show Config' options. At the bottom, a terminal window shows the output 'Table made' and the command prompt 'PS C:\Users\Ojasvi\OneDrive - Manipal University Jaipur\Pictures\Hangman Game in C\assignment 7>'. The status bar at the bottom indicates 'Ln 17, Col 13'.

The screenshot shows a code editor interface with the following details:

- Title Bar:** File Edit Selection View Go Run ...
- Search Bar:** Q assignment 7
- Toolbar:** Includes icons for file operations like Open, Save, Find, and Run.
- Sidebar:** Shows a tree view of files: insert.py > ...
- Code Editor:** Displays the following Python script:

```
1 import psycopg2
2
3 conn = psycopg2.connect(
4     database="assignment7_db",
5     user="postgres",
6     password="mahisinha",
7     host="localhost",
8     port="5432"
9 )
10 cur = conn.cursor()
11
12 cur.execute("""
13 INSERT INTO students (name, age, marks)
14 VALUES
15 ('Aman', 20, 85),
16 ('Riya', 21, 90)
17 """
18 )
19
20 conn.commit()
21 print("Data added")
22
23 cur.close()
24 conn.close()
25
```
- Right Panel:**
  - Build with Agent:** A section with a speech bubble icon and the text "Build with Agent". Below it says "AI responses may be inaccurate." and "Generate Agent Instructions to onboard AI onto your codebase."
  - Suggested Actions:** Buttons for "Build Workspace" and "Show Config".
  - A "powershell" terminal window is open in the sidebar.
- Bottom Navigation:** PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL, PORTS.
- Terminal:** /assignment 7/insert.py" Data added PS C:\Users\Ojasvi\OneDrive - Manipal University Jaipur\Pictures\Hangman Game in C\assignment 7>
- Status Bar:** In 24, Col 13 Spaces: 4 UTF-8 { } Python Python 3.14 (64-bit) (Go Live)
- System Tray:** Shows battery level, signal strength, and date/time (23-12-2025).

A screenshot of the Visual Studio Code (VS Code) interface. The top bar shows the file path "C:\assignment 7" and various window control icons. The left sidebar contains icons for file operations like Open, Save, Find, and others. The main editor area displays a Python script named "show.py". The code connects to a PostgreSQL database named "assignment7\_db" using the psycopg2 library. It performs a SELECT query on the "students" table and prints the results. The terminal below shows the output of the script, which includes two rows of student data: (1, 'Aman', 20, 85) and (2, 'Riya', 21, 90). A status bar at the bottom provides system information like weather (13°C), battery level (80%), and system date (23-12-2025).

```
File Edit Selection View Go Run ... ← → Q assignment 7
```

```
import psycopg2
conn = psycopg2.connect(
    database="assignment7_db",
    user="postgres",
    password="mahisinha",
    host="localhost",
    port="5432"
)
cur = conn.cursor()
cur.execute("SELECT * FROM students")
rows = cur.fetchall()
for r in rows:
    print(r)
cur.close()
conn.close()
```

```
(1, 'Aman', 20, 85)
(2, 'Riya', 21, 90)
PS C:\Users\Ojasvi\OneDrive - Manipal University Jaipur\Pictures\Hangman Game in C\assignment 7>
```

Build with Agent

AI responses may be inaccurate.

Generate Agent Instructions to onboard AI onto your codebase.

SUGGESTED ACTIONS

- Build Workspace
- Show Config
- powershell
- Python Deb...
- powershell

Describe what to build

Spaces: 4 UTF-8 { } Python Python 3.14 (64-bit) Go Live

13°C Clear ENG IN 23-12-2025

The screenshot shows a Microsoft Visual Studio Code (VS Code) interface. The top bar displays the file path "C:\assignment 7\update.py" and the title "assignment 7". The left sidebar contains icons for file operations like Open, Save, Find, and Build. The main editor area shows Python code for connecting to a PostgreSQL database and updating student marks. The terminal below shows the command-line output of running the script.

```
File Edit Selection View Go Run ... ← → Q assignment 7
```

```
import psycopg2
conn = psycopg2.connect(
    database="assignment7_db",
    user="postgres",
    password="mahisinha",
    host="localhost",
    port="5432")
cur = conn.cursor()
cur.execute("UPDATE students SET marks = 95 WHERE name = 'Aman'")
conn.commit()
print("Marks changed")
cur.close()
conn.close()
```

(1, 'Aman', 20, 85)  
(2, 'Riya', 21, 90)

```
PS C:\Users\Ojasvi\OneDrive - Manipal University Jaipur\Pictures\Hangman Game in C\assignment 7> & C:\Users\Ojasvi\AppData\Local\Programs\Python\Python314\python.exe "c:/Users/Ojasvi/OneDrive - Manipal University Jaipur/Pictures/Hangman Game in C /assignment 7/update.py"
Marks changed
PS C:\Users\Ojasvi\OneDrive - Manipal University Jaipur\Pictures\Hangman Game in C\assignment 7>
```

SUGGESTED ACTIONS

- Build Workspace
- Show Config
- powershell
- Python Deb...
- powershell

Build with Agent

AI responses may be inaccurate.

Generate Agent Instructions to onboard AI onto your codebase.

Spaces: 4 UTF-8 {} Python Python 3.14 (64-bit) Go Live ENG IN 23-12-2025

The screenshot shows a Microsoft Visual Studio Code (VS Code) interface. The top bar includes File, Edit, Selection, View, Go, Run, and other standard menu items. A search bar at the top right contains the text "assignment 7". The main workspace displays a Python script named "delete.py" with the following code:

```
1 import psycopg2
2
3 conn = psycopg2.connect(
4     database="assignment7_db",
5     user="postgres",
6     password="mahisinha",
7     host="localhost",
8     port="5432"
9 )
10
11 cur = conn.cursor()
12
13 cur.execute("DELETE FROM students WHERE name = 'Riya'")
14 conn.commit()
15
16 print("Deleted")
17
18 cur.close()
19 conn.close()
20
```

The terminal below the editor shows the command-line output of running the script:

```
PS C:\Users\Ojasvi\OneDrive - Manipal University Jaipur\Pictures\Hangman Game in C\assignment 7> & C:\Users\Ojasvi\AppData\Local\Programs\Python\Python314\python.exe "c:/Users/Ojasvi/OneDrive - Manipal University Jaipur/Pictures/Hangman Game in C /assignment 7/delete.py"
Deleted
PS C:\Users\Ojasvi\OneDrive - Manipal University Jaipur\Pictures\Hangman Game in C\assignment 7> []
```

On the right side of the interface, there is a "Build with Agent" panel with a message about AI responses being inaccurate and a "Generate Agent Instructions" button. Below it is a "SUGGESTED ACTIONS" section with a "Build Workspace" button. The bottom of the screen features a taskbar with various icons for file operations, search, and system status.

### Create Account 🌸

First Name

Last Name

Email

Phone

Subject

Register

Already have an account? [Login](#)

## Django REST framework

Student List

### Student List

OPTIONS

GET ▾

GET /api/students/

HTTP 200 OK  
Allow: POST, GET, OPTIONS  
Content-Type: application/json  
Vary: Accept

[]

Media type:

application/json

Content:

POST



quotes



requirements



scraper