

```
grp7_tiqui_ex5.py
grp7_tiqui_ex5.py > ...
1 import math
2
3 # Trigonometric functions
4 angle_deg = 50
5
6 angle_rad = math.radians(angle_deg)
7
8 sin_result = math.sin(angle_rad)
9
10 print(f"The sin of {angle_deg} degrees is: {sin_result}")
11
```

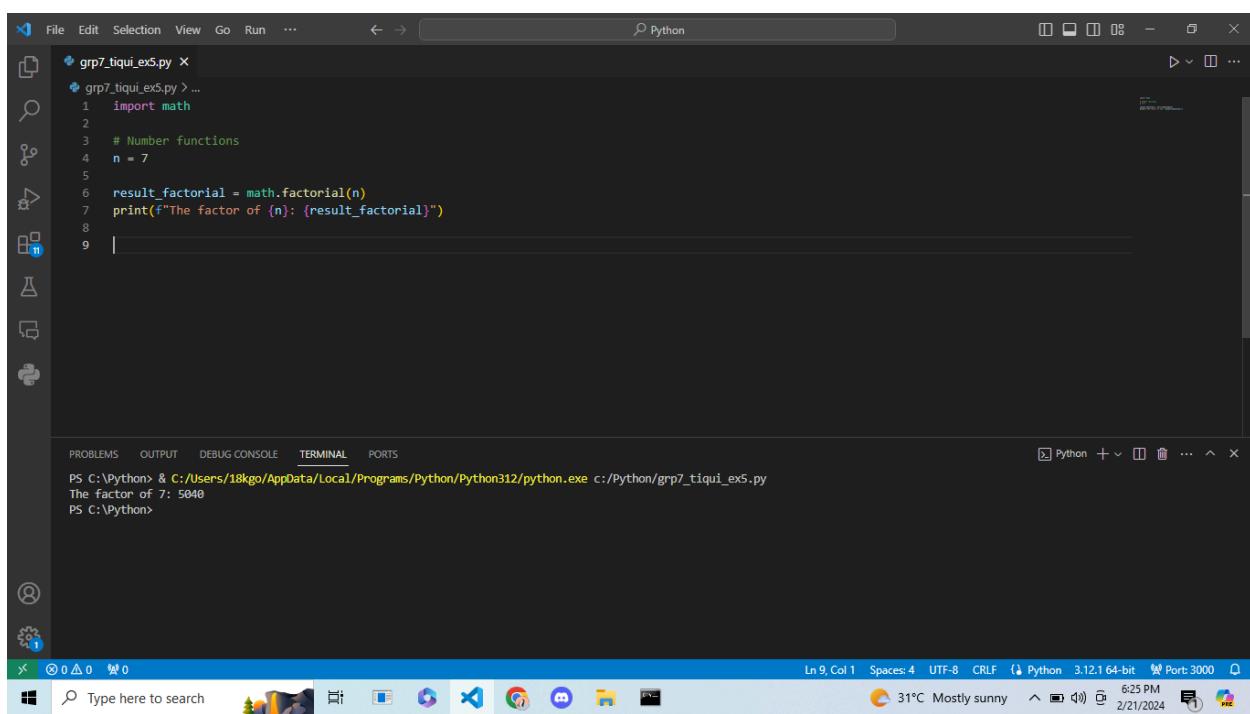
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Python> & C:/Users/18kgo/AppData/Local/Programs/Python/Python312/python.exe c:/Python/grp7\_tiqui\_ex5.py  
The sin of 50 degrees is: 0.76604443118978  
PS C:\Python>

```
grp7_tiqui_ex5.py
grp7_tiqui_ex5.py > ...
1 import math
2
3 # Number functions
4 n = 7
5
6 result_factorial = math.factorial(n)
7 print(f"The factor of {n}: {result_factorial}")
8
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Python> & C:/Users/18kgo/AppData/Local/Programs/Python/Python312/python.exe c:/Python/grp7\_tiqui\_ex5.py  
The factor of 7: 5040  
PS C:\Python>



```
grp7_tiqui_ex5.py
grp7_tiqui_ex5.py > ...
1 import math
2
3 # Trigonometric functions
4 angle_deg = 50
5
6 angle_rad = math.radians(angle_deg)
7
8 sin_result = math.sin(angle_rad)
9
10 print(f"The sin of {angle_deg} degrees is: {sin_result}")
11
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Python> & C:/Users/18kgo/AppData/Local/Programs/Python/Python312/python.exe c:/Python/grp7\_tiqui\_ex5.py  
The sin of 50 degrees is: 0.76604443118978  
PS C:\Python>

```
grp7_tiqui_ex5.py
grp7_tiqui_ex5.py > ...
1 import math
2
3 # Number functions
4 n = 7
5
6 result_factorial = math.factorial(n)
7 print(f"The factor of {n}: {result_factorial}")
8
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Python> & C:/Users/18kgo/AppData/Local/Programs/Python/Python312/python.exe c:/Python/grp7\_tiqui\_ex5.py  
The factor of 7: 5040  
PS C:\Python>

The screenshot shows the Microsoft Visual Studio Code interface with a dark theme. On the left is a sidebar with icons for file operations, search, and other tools. The main area displays a Python script named `grp7_tiqui_ex5.py`. The code imports the `math` module and calculates the hyperbolic sine of 4 using `math.sinh`. It then prints the result with an f-string. Below the code editor is a terminal window showing the output of running the script in Python 3.12.1 64-bit on Windows 10. The terminal shows the script was run from `C:\Python`, it printed the result `27.28991719712773`, and then returned to the prompt `PS C:\Python>`. The system tray at the bottom indicates it's 6:30 PM on 2/21/2024, the temperature is 31°C, and the weather is mostly sunny.

```
grp7_tiqui_ex5.py
grp7_tiqui_ex5.py > ...
1 import math
2
3 # Hyperbolic functions
4 hyperbolic_x = 4
5
6 sin2_result = math.sinh(hyperbolic_x)
7
8 print(f"The hyperbolic sin of {hyperbolic_x} is: {sin2_result}")
9
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Python> & C:/Users/18kgo/AppData/Local/Programs/Python/Python312/python.exe c:/Python/grp7\_tiqui\_ex5.py  
The hyperbolic sin of 4 is: 27.28991719712773  
PS C:\Python>

Ln 9 Col 1 Spaces: 4 UTF-8 CRLF Python 3.12.1 64-bit Port 3000

31°C Mostly sunny 6:30 PM 2/21/2024

This screenshot is identical to the one above, showing the same Python script `grp7_tiqui_ex5.py` and its execution output in the terminal. The terminal shows the script was run from `C:\Python`, it printed the result `1.0471975511965976` (radians), and then returned to the prompt `PS C:\Python>`. The system tray at the bottom indicates it's 6:28 PM on 2/21/2024, the temperature is 31°C, and the weather is mostly sunny.

```
grp7_tiqui_ex5.py
grp7_tiqui_ex5.py > ...
1 import math
2
3 # Angular conversion functions
4 angle_rad2 = math.pi / 3
5
6 angle_deg2 = math.degrees(angle_rad2)
7
8 print(f"{angle_rad2} radians is equal to {angle_deg2} degrees")
9
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Python> & C:/Users/18kgo/AppData/Local/Programs/Python/Python312/python.exe c:/Python/grp7\_tiqui\_ex5.py  
1.0471975511965976 radians is equal to 59.99999999999999 degrees  
PS C:\Python>

Ln 9 Col 1 Spaces: 4 UTF-8 CRLF Python 3.12.1 64-bit Port 3000

31°C Mostly sunny 6:28 PM 2/21/2024

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

- File Bar:** File, Edit, Selection, View, Go, Run, ...
- Title Bar:** Python
- Toolbar:** Includes icons for file operations (New, Open, Save, etc.), search, and other development tools.
- Code Area:** A code editor window containing the following Python script:

```
grp7_tiqui_ex5.py
grp7_tiqui_ex5.py > ...
1 import math
2
3 # Power and logarithmic functions
4 base = 5
5 exponent = 5
6
7 power_result = math.pow(base, exponent)
8
9 log_result = math.log10(power_result)
10
11 print(f"{base} raised to the power {exponent} is: {power_result}")
12
13 print(f"Logarithm base 10 of ({base}^{exponent}) is: {log_result}")
14
```
- Terminal:** Shows command-line output from running the script:

```
PS C:\Python> & C:/Users/18kg0/AppData/Local/Programs/Python/Python312/python.exe c:/Python/grp7_tiqui_ex5.py
5 raised to the power 5 is: 3125.0
Logarithm base 10 of (5^5) is: 3.494850021680094
PS C:\Python>
```
- Bottom Bar:** Includes tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL, and PORTS. The TERMINAL tab is active.
- System Tray:** Shows the date and time (6:26 PM, 2/21/2024), battery status, and network connection.