

## AI ASSITED CODING

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BATCH:13

The screenshot shows a code editor interface with a Python file named 'palindrome 1.py' open. The code defines a function to check if a string is a palindrome and includes an example usage with user input. Below the editor is a terminal window showing the script being run and outputting 'level' as a palindrome.

```
palindrome 1.py reverse string 3.py calculator 4.py sequence 2.py
palindrome 1.py > ...
1  # function to check if a string is a valid palindrome
2  def is_palindrome(s):
3      # Remove spaces and convert to lowercase
4      s = s.replace(" ", "").lower()
5      # Check if the string is equal to its reverse
6      return s == s[::-1]
7
8  # Example usage
9  string = input("Enter a string: ")
10 if is_palindrome(string):
11     print("The string is a palindrome!")
12 else:
13     print("The string is not a palindrome.")

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS Python + ×
PS C:\Users\nered\OneDrive\Desktop\wtml> & C:/Users/nered/AppData/Local/Programs/Python/Python313/python.exe "c:/users/nered/onedrive/desktop/wtml/palindrome 1.py"
Enter a string: level
The string is a palindrome.
PS C:\Users\nered\OneDrive\Desktop\wtml>
```

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The screenshot shows a code editor window with several tabs at the top: 'palindrome 1.py', 'reverse string 3.py', 'calculator 4.py', and 'sequence 2.py'. The 'sequence 2.py' tab is active, displaying the following Python code:

```
# Function to return the Fibonacci sequence up to n terms
def fibonacci_sequence(n):
    """
    Returns a list containing the Fibonacci sequence up to n terms.
    """
    sequence = []
    a, b = 0, 1
    for _ in range(n):
        sequence.append(a)
        a, b = b, a + b
    return sequence

# Example usage
num_terms = int(input("Enter the number of terms: "))
print("Fibonacci sequence:", fibonacci_sequence(num_terms))
```

Below the code editor is a terminal window with the following output:

```
PS C:\Users\nered\OneDrive\Desktop\wtml> & C:/Users/nered/AppData/Local/Programs/Python/Python313/python.exe "C:/Users/nered/OneDrive/Desktop/wtml/sequence 2.py"
Enter the number of terms: 2
Fibonacci sequence: [0, 1]
PS C:\Users\nered\OneDrive\Desktop\wtml>
```

The screenshot shows a code editor window with several tabs at the top: 'palindrome 1.py', 'reverse string 3.py', 'calculator 4.py', and 'sequence 2.py'. The 'reverse string 3.py' tab is active, displaying the following Python code:

```
# Function to reverse a string
def reverse_string(s):
    return s[::-1]

# Example usage
input_str = input("Enter a string: ")
print("reversed string:", reverse_string(input_str))
```

Below the code editor is a terminal window with the following output:

```
PS C:\Users\nered\OneDrive\Desktop\wtml> & C:/Users/nered/AppData/Local/Programs/Python/Python313/python.exe "C:/Users/nered/OneDrive/Desktop/wtml/reverse string 3.py"
Enter a string: hello
reversed string: olleh
PS C:\Users\nered\OneDrive\Desktop\wtml>
```

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```
palindrome 1.py • reverse string 3.py • calculator 4.py • sequence 2.py •
calculator 4.py > ...
1 # Program to simulate a basic calculator
2
3 def add(x, y):
4     return x + y
5
6 def subtract(x, y):
7     return x - y
8
9 def multiply(x, y):
10    return x * y
11
12 def divide(x, y):
13     if y == 0:
14         return "Error! Division by zero."
15     return x / y
16
17 print("Select operation:")
18 print("1. Add")
19 print("2. Subtract")
20 print("3. Multiply")
21 print("4. Divide")
22
23 choice = input("Enter choice (1/2/3/4): ")
24
25 num1 = float(input("Enter first number: "))
26 num2 = float(input("Enter second number: "))
27
28 if choice == '1':
29     print("Result:", add(num1, num2))
30 elif choice == '2':
31     print("Result:", subtract(num1, num2))
32 elif choice == '3':
33     print("Result:", multiply(num1, num2))
34 elif choice == '4':
35     print("Result:", divide(num1, num2))
36 else:
37     print("invalid input")
```

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS Python + x

PS C:\Users\nered\OneDrive\Desktop>wml> & c:/Users/nered/AppData/Local/Programs/Python/Python313/python.exe "c:/users/nered/oneDrive/Desktop/wml/calculator_4.py"
Select operation:
1. Add
2. Subtract
3. Multiply
4. Divide
Enter choice (1/2/3/4): 3
Enter first number: 2
Enter second number: 4
Result: 8.0
PS C:\Users\nered\OneDrive\Desktop>wml>
```