

Multiplication Table Assignment

Overview

Create a multiplication table function that uses nested for loops to print a multiplication table.

Requirements

Function Structure

Your `multiplication_table` function should:

1. **Take a parameter `n`** for the table size (1 to n)
2. **Use nested for loops** to generate the table
3. **Print each multiplication** in the format "a x b = c"
4. **Print one multiplication per line**
5. **Use `print()`** to display the table

Expected Behavior

Example Usage

```
def multiplication_table(n):  
    # Your implementation here  
    pass  
  
# When called with multiplication_table(3), it should print:  
# 1 x 1 = 1  
# 1 x 2 = 2  
# 1 x 3 = 3  
# 2 x 1 = 2  
# 2 x 2 = 4  
# 2 x 3 = 6  
# 3 x 1 = 3  
# 3 x 2 = 6  
# 3 x 3 = 9
```

Test Cases

Your implementation should pass all the following test cases:

1. **1 to 5 table:** Complete 5x5 multiplication table
2. **1 to 3 table:** Complete 3x3 multiplication table
3. **1 to 10 table:** Complete 10x10 multiplication table
4. **Nested loops:** Function uses nested for loop structure
5. **Single number:** Handles table size of 1

6. **Correct format:** Output follows "a x b = c" format

Implementation Tips

- Use two nested for loops (outer and inner)
- Outer loop: 1 to n (inclusive)
- Inner loop: 1 to n (inclusive)
- Print each multiplication as "a x b = c"
- Use `print()` function to display results
- Make sure to include all combinations