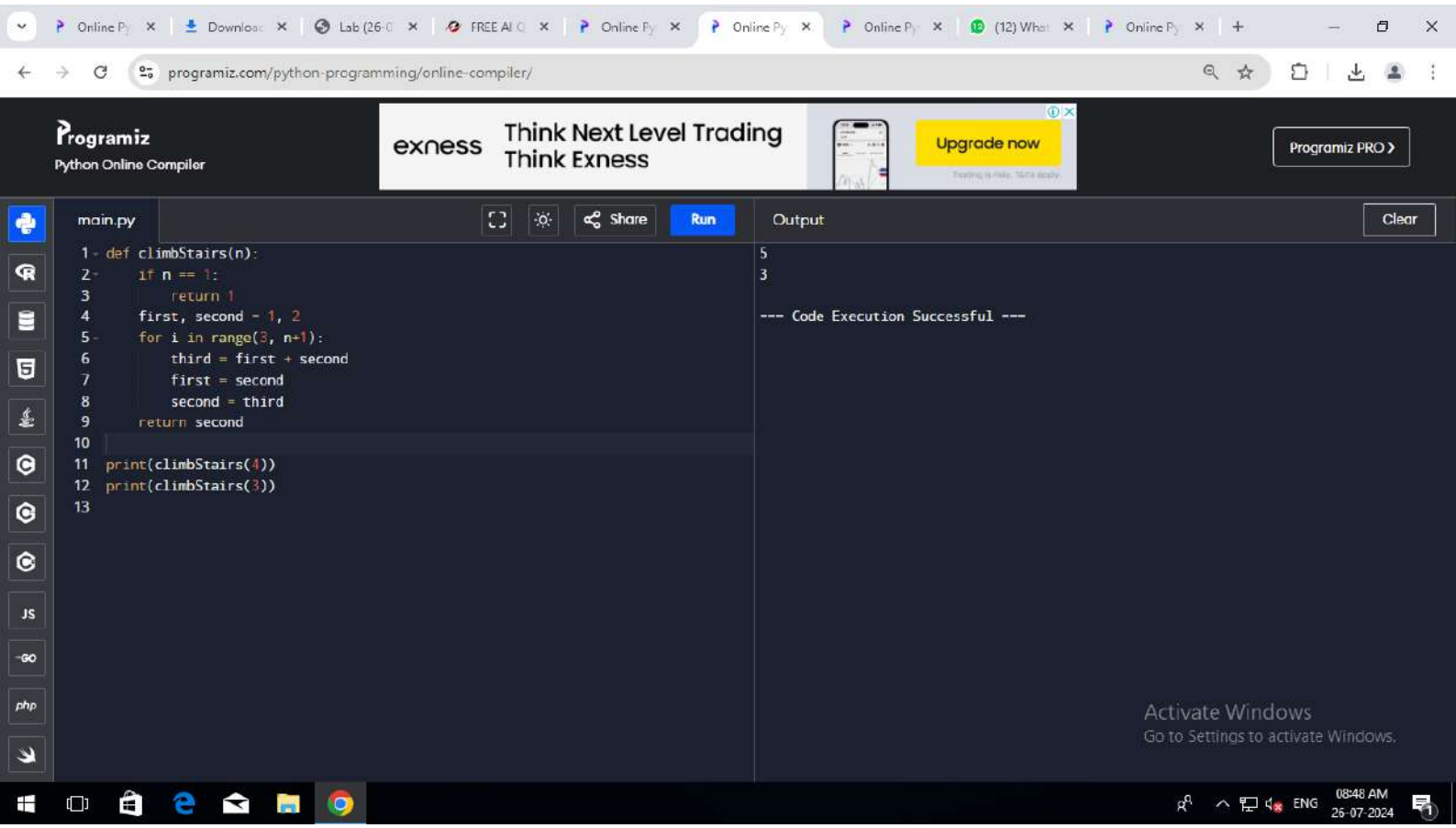
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Clear
def climbStairs(n):
if n == 1:
return 1
first, second = 1, 2
for i in range(3, n+1):
third = first + second
first = second
second = third
return second
print(climbStairs(4))
print(climbStairs(3))
5
3
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main.py

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```python
def uniquePaths(m, n):
    dp = [[1] * n for _ in range(m)]

    for i in range(1, m):
        for j in range(1, n):
            dp[i][j] = dp[i-1][j] + dp[i][j-1]

    return dp[m-1][n-1]

# Examples
print(uniquePaths(7, 3))
print(uniquePaths(3, 2))
```

Output Clear

```
28
3

--- Code Execution Successful ---
```


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```python
def large_group_positions(s):
    result = []
    start = 0
    for end in range(len(s)):
        if end == len(s) - 1 or s[end] != s[end + 1]:
            if end - start + 1 >= 3:
                result.append([start, end])
            start = end + 1
    return result

# Test cases
print(large_group_positions("abbxxxxzzy"))
print(large_group_positions("abc"))
```

Output

Clear

```
[[3, 6]]
[]

--- Code Execution Successful ---
```


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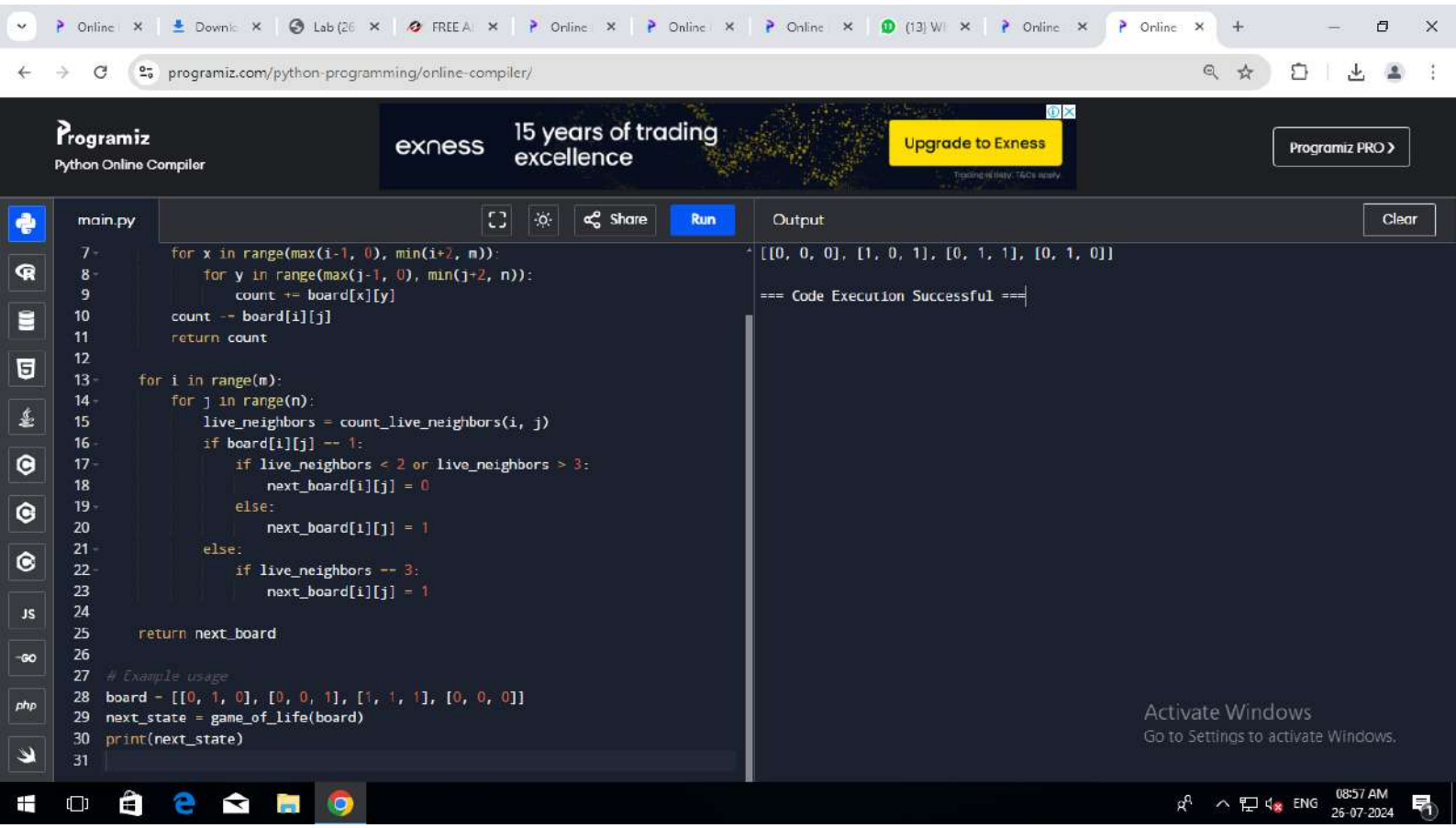
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for x in range(max(i-1, 0), min(i+2, m)):
for y in range(max(j-1, 0), min(j+2, n)):
count += board[x][y]
count -= board[i][j]
return count
for i in range(m):
for j in range(n):
live_neighbors = count_live_neighbors(i, j)
if board[i][j] == 1:
if live_neighbors < 2 or live_neighbors > 3:
next_board[i][j] = 0
else:
next_board[i][j] = 1
else:
if live_neighbors == 3:
next_board[i][j] = 1
return next_board
# Example usage
board = [[0, 1, 0], [0, 0, 1], [1, 1, 1], [0, 0, 0]]
next_state = game_of_life(board)
print(next_state)
[[0, 0, 0], [1, 0, 1], [0, 1, 1], [0, 1, 0]]
=== Code Execution Successful ===
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```python
def champagne_pyramid(row, glass, poured):
    pyramid = [[0] * i for i in range(1, row + 1)]
    pyramid[0][0] = poured

    for r in range(row):
        for g in range(len(pyramid[r])):
            overflow = (pyramid[r][g] - 1) / 2
            if overflow > 0:
                pyramid[r + 1][g] += overflow
                pyramid[r + 1][g + 1] += overflow

    return min(1, pyramid[row - 1][glass - 1])

# Example usage
row = 3
glass = 2
poured = 4
result = champagne_pyramid(row, glass, poured)
print(f"The amount of champagne in row {row}, glass {glass} is: {result}")
```

Output Clear

```
The amount of champagne in row 3, glass 2 is: 0.5

=== Code Execution Successful ===
```


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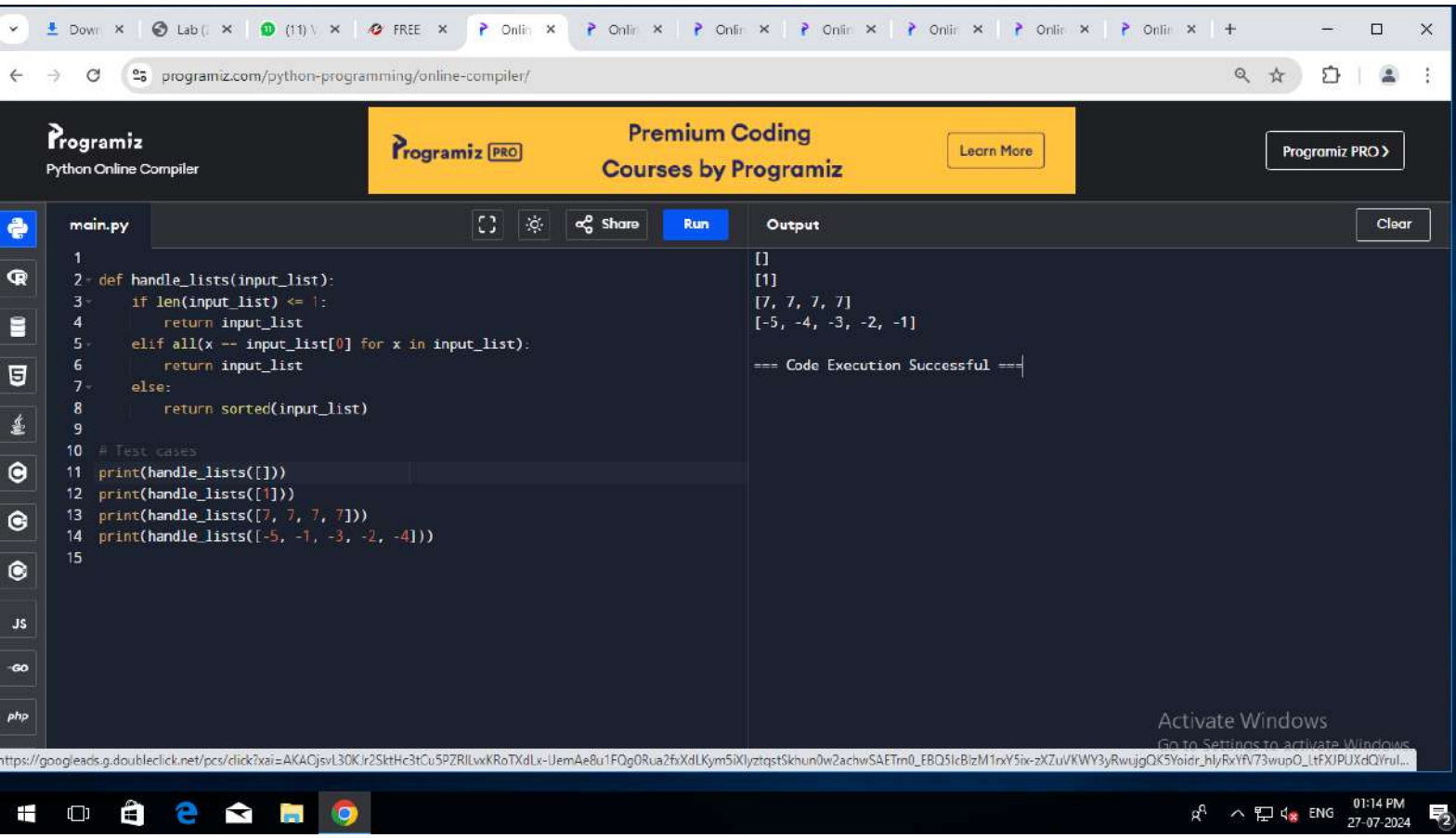
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Clear
def handle_lists(input_list):
if len(input_list) <= 1:
return input_list
elif all(x == input_list[0] for x in input_list):
return input_list
else:
return sorted(input_list)
# Test cases
print(handle_lists([]))
print(handle_lists([1]))
print(handle_lists([7, 7, 7, 7]))
print(handle_lists([-5, -1, -3, -2, -4]))
[]
[1]
[7, 7, 7, 7]
[-5, -4, -3, -2, -1]
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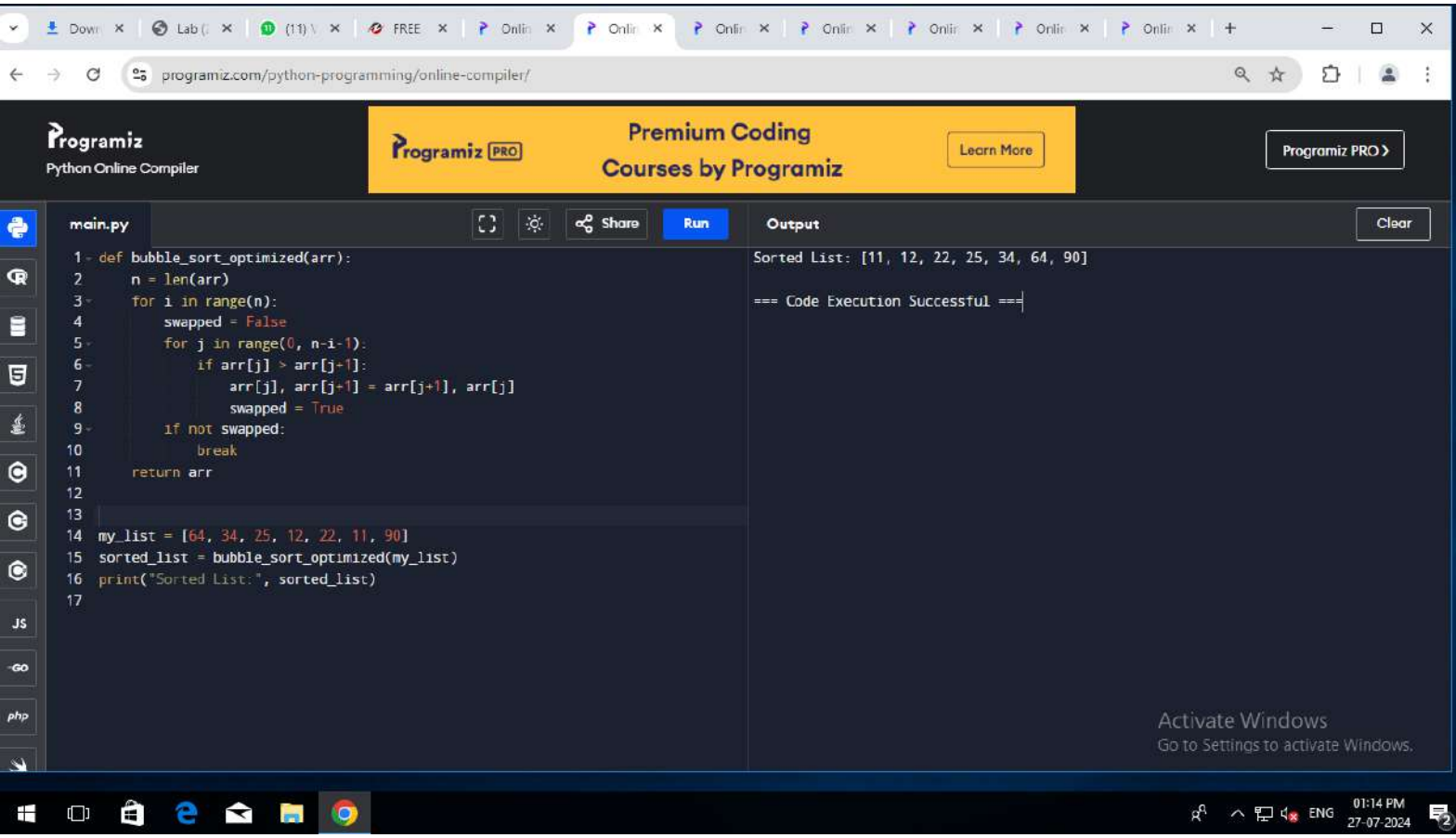
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Output
Clear
def bubble_sort_optimized(arr):
n = len(arr)
for i in range(n):
swapped = False
for j in range(0, n-i-1):
if arr[j] > arr[j+1]:
arr[j], arr[j+1] = arr[j+1], arr[j]
swapped = True
if not swapped:
break
return arr
my_list = [64, 34, 25, 12, 22, 11, 90]
sorted_list = bubble_sort_optimized(my_list)
print("Sorted List:", sorted_list)
Sorted List: [11, 12, 22, 25, 34, 64, 90]
=== Code Execution Successful ===
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