CSA0619-DAA(DAY 2)

1.

main.py

```python
MOD = 1000000007
def findPaths(m, n, N, i, j):
    dp = [[0] * n for _ in range(m)]
    dp[i][j] = 1
    result = 0
    for steps in range(N):
        temp = [[0] * n for _ in range(m)]
        for r in range(m):
            for c in range(n):
                if dp[r][c] > 0:
                    if r == 0:
                        result = (result + dp[r][c]) % MOD
                    else:
                        temp[r-1][c] = (temp[r-1][c] + dp[r][c]
                            ) % MOD

                    if r == m-1:
                        result = (result + dp[r][c]) % MOD
                    else:
                        temp[r+1][c] = (temp[r+1][c] + dp[r][c]
                            ) % MOD

                    if c == 0:
                        result = (result + dp[r][c]) % MOD
```

Output

```
6

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

2.

main.py

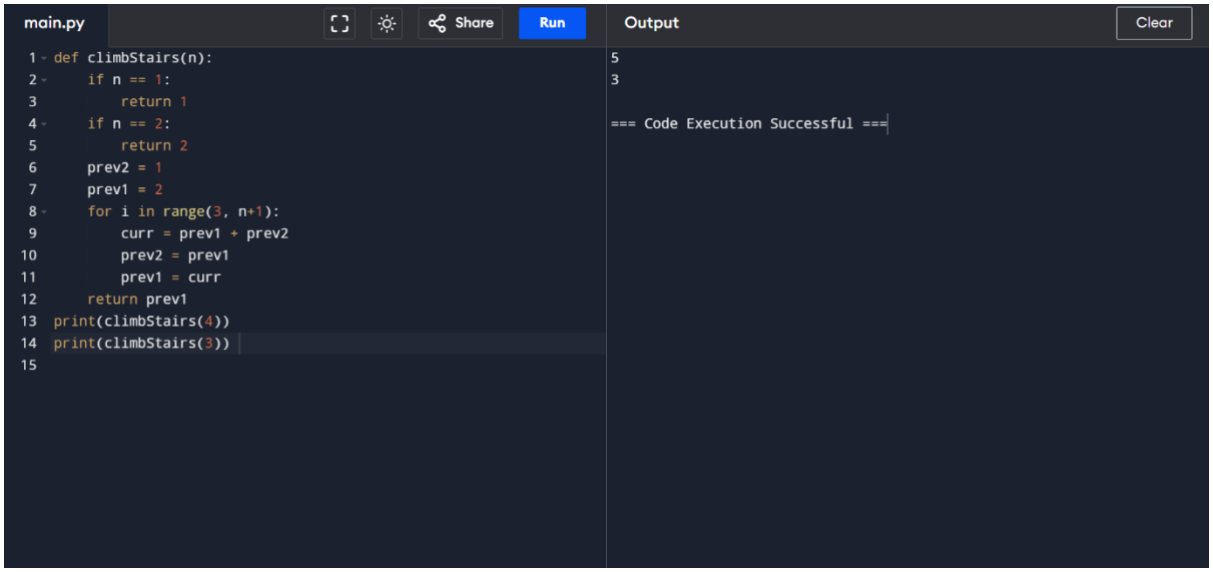
```python
def rob_linear(nums):
    prev, curr = 0, 0
    for num in nums:
        prev, curr = curr, max(curr, prev + num)
    return curr
def rob(nums):
    if len(nums) == 1:
        return nums[0]
    money1 = rob_linear(nums[:-1])
    money2 = rob_linear(nums[1:])
    return max(money1, money2)
nums = [2, 3, 2]
print(rob(nums))
```

Output

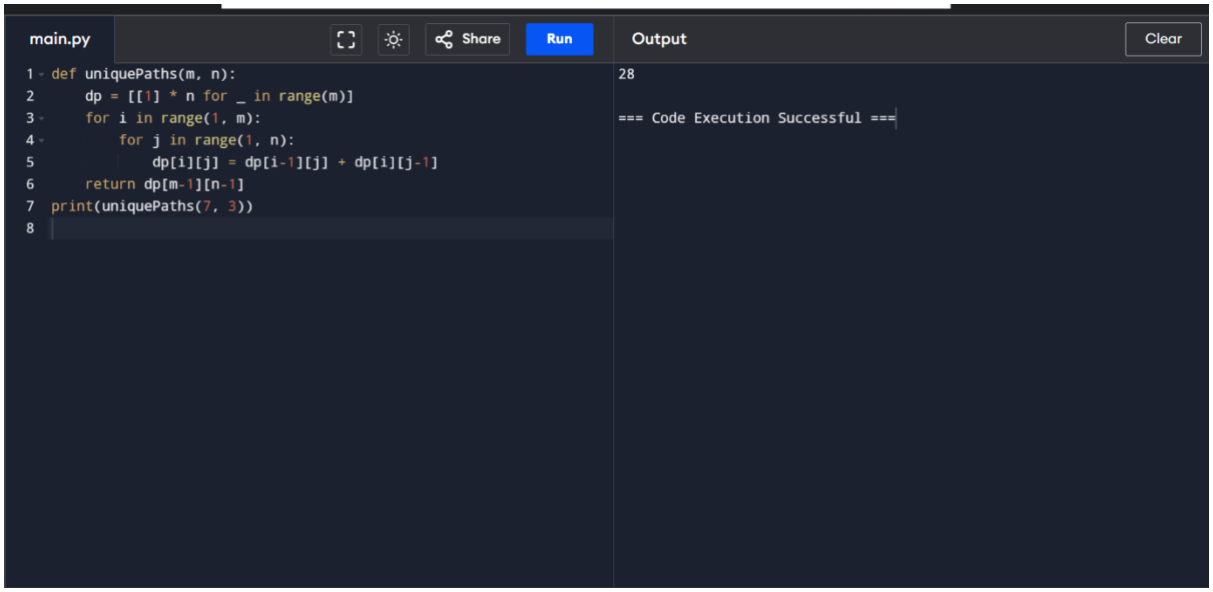
```
3

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

CSA0619-DAA(DAY 2)

3.



4.



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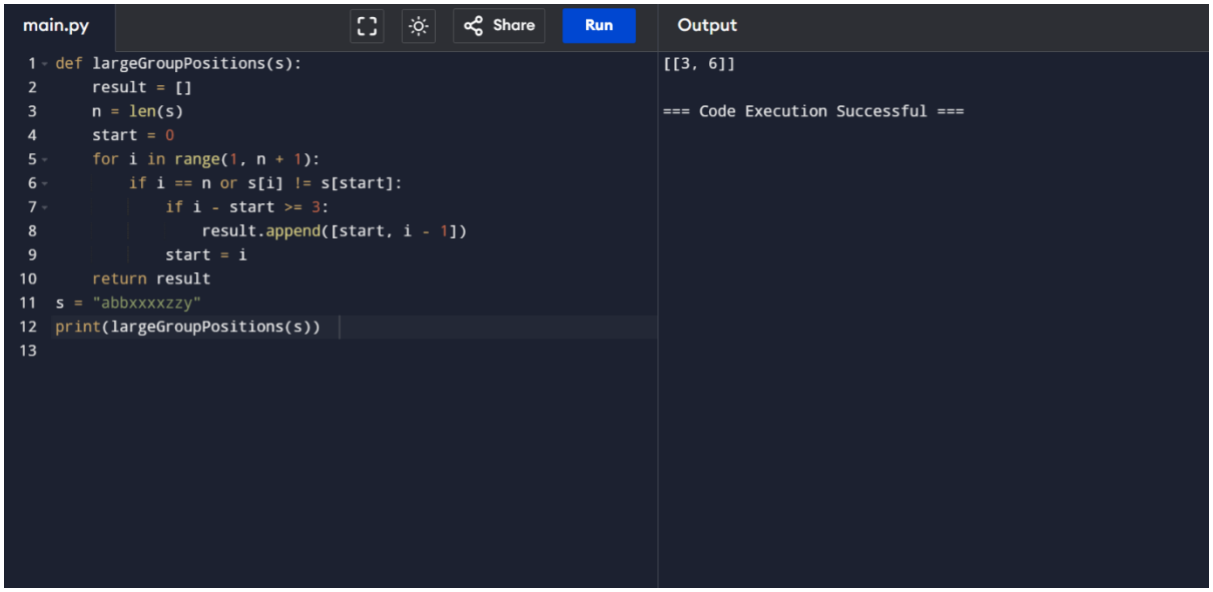
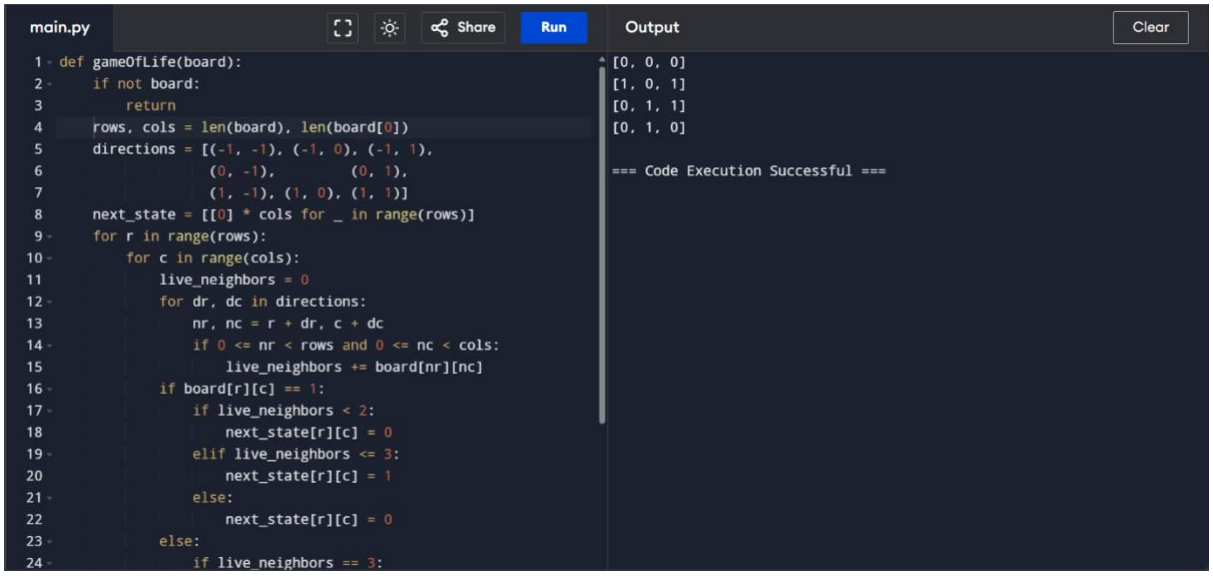
5.



6.



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7.