

138. A robot is located at the top-left corner of a  $m \times n$  grid. The robot can only move either down or right at any point in time. The robot is trying to reach the bottom-right corner of the grid. How many possible unique paths are there?

Program:

class Solution:

```
def uniquePaths(self, m: int, n: int) -> int:
```

```
    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]
```

# Example

```
sol = Solution()
```

```
m = 7
```

```
n = 3
```

```
output = sol.uniquePaths(m, n)
```

```
print(output)
```

output:

28

=== Code Execution Successful ===

TIME COMPLEXITY:- $O(m \cdot n)$