124) Finding the number of ways to move ball out of grid boundary

CODE:

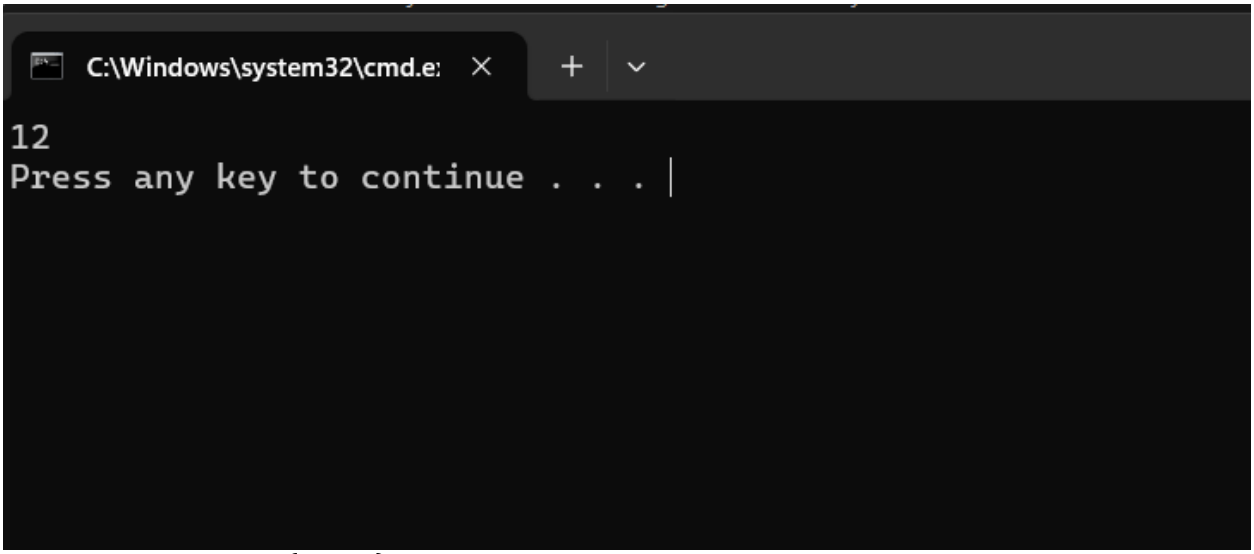
```
def findPaths(m, n, N, i, j):
    MOD = 10**9 + 7
    dp = [[[0 for _ in range(n)] for _ in range(m)] for _ in range(N+1)]

    for step in range(1, N+1):
        for x in range(m):
            for y in range(n):
                for dx, dy in [(1, 0), (-1, 0), (0, 1), (0, -1)]:
                    nx, ny = x + dx, y + dy
                    if nx < 0 or nx >= m or ny < 0 or ny >= n:
                        dp[step][x][y] += 1
                    else:
                        dp[step][x][y] = (dp[step][x][y] + dp[step-1][nx][ny]) % MOD

    return dp[N][i][j]

# Example Usage
m, n, N, i, j = 1,3,3,0,1
output = findPaths(m, n, N, i, j)
print(output)
```

OUTPUT:



TIME COMPLEXITY : O(n*m*N)