Print the given matrix in spiral order

CODE:

def print\_spiral\_order(matrix):

rows = len(matrix)

cols = len(matrix[0])

top, bottom, left, right = 0, rows - 1, 0, cols - 1

while top <= bottom and left <= right:

# Print top row

for i in range(left, right + 1):

print(matrix[top][i], end=" ")

top += 1

# Print right column

for i in range(top, bottom + 1):

print(matrix[i][right], end=" ")

right -= 1

# Print bottom row

if top <= bottom:

for i in range(right, left - 1, -1):

print(matrix[bottom][i], end=" ")

bottom -= 1

# Print left column

if left <= right:

for i in range(bottom, top - 1, -1):

print(matrix[i][left], end=" ")

left += 1

# Get dimensions of the matrix from the user

rows = int(input("Enter the number of rows in the matrix: "))

cols = int(input("Enter the number of columns in the matrix: "))

# Get the matrix from the user

matrix = []

print("Enter the elements of the matrix:")

for i in range(rows):

row = []

for j in range(cols):

element = int(input(f"Enter element at position ({i + 1}, {j + 1}): "))

row.append(element)

matrix.append(row)

# Print the matrix in spiral order

print("\nMatrix in Spiral Order:")

print\_spiral\_order(matrix)

OUTPUT:

Enter the number of rows in the matrix: 3

Enter the number of columns in the matrix: 3

Enter the elements of the matrix:

Enter element at position (1, 1): 2

Enter element at position (1, 2): 5

Enter element at position (1, 3): 3

Enter element at position (2, 1): 6

Enter element at position (2, 2): 4

Enter element at position (2, 3): 1

Enter element at position (3, 1): 9

Enter element at position (3, 2): 7

Enter element at position (3, 3): 8

Matrix in Spiral Order:

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