33. Leftmost Column with at Least a One

A row-sorted binary matrix means that all elements are 0 or 1 and each row of the matrix

is sorted in non-decreasing order.

Given a row-sorted binary matrix binaryMatrix, return the index (0-indexed) of the

leftmost column with a 1 in it. If such an index does not exist, return -1.

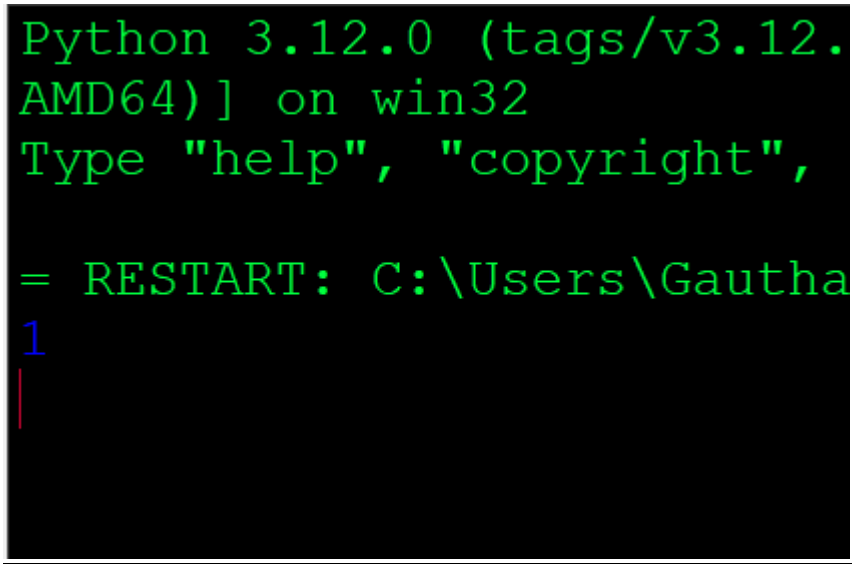
You can't access the Binary Matrix directly. You may only access the matrix using a

BinaryMatrix interface:

Code:

```
class BinaryMatrix:
    def get(self, row: int, col: int) -> int:
        pass

    def dimensions(self) -> list:
        pass

def leftMostColumnWithOne(binaryMatrix: 'BinaryMatrix') -> int:
    rows, cols = binaryMatrix.dimensions()
    current_row, current_col = 0, cols - 1
    result = -1

    while current_row < rows and current_col >= 0:
        if binaryMatrix.get(current_row, current_col) == 1:
            result = current_col
            current_col -= 1
        else:
            current_row += 1

    return result
class MockBinaryMatrix(BinaryMatrix):
    def __init__(self, mat):
        self.mat = mat

    def get(self, row, col):
        return self.mat[row][col]

    def dimensions(self):
        return [len(self.mat), len(self.mat[0])]

binaryMatrix = MockBinaryMatrix([
    [0, 0, 0, 1],
    [0, 0, 1, 1],
    [0, 1, 1, 1],
    [0, 0, 0, 0]
])
print(leftMostColumnWithOne(binaryMatrix))
```

Output:



Time Complexity:

- T(n)= O(n)