TASK: **What is the expected running time of the following C# code? Explain why.**

**long CalcCount(int[,] matrix)**

**{**

**long count = 0;**

**for (int row=0; row<matrix.GetLength(0); row++)**

**if (matrix[row, 0] % 2 == 0)**

**for (int col=0; col<matrix.GetLength(1); col++)**

**if (matrix[row,col] > 0)**

**count++;**

**return count;**

**}**

ANSWER: It’s hard to tell. The first loop iterates from 0 to n(matrixGetLength(0)). **We enter the second loop only if matrix[row, 0] % 2 == 0, which means we have two cases.**

1. If we assume the times matrix[row, 0] % 2 == 0 is a constant number, then the answer should be O(n + m)
2. If we assume the times matrix[row, 0] % 2 == 0 is a number as big as n, then the answer should be O(n\*m)