## Data Structures and Algorithms Complexity Homework

Task 1. The complexity of for cycle is **n** and the nested while cycle will be executed **(n-1)** times. So the complexity of all code is **O(n \* (n-1))** and after removing constant is **O(n2).**

Task 2. We are iterating over matrix. The outer for cycle will be executed exactly **n** times. For inner cycle we have condition depending on a constant, so complexity is **const \* m.** The complexity of method **CalcCount is O(n \* m)** after removing the constants.

Task 3. In the method CalcSum we have one for cycle with complexity **m** and a recursive call to the same method that will be executed **(n - row)** times. After removing constants complexity is: **O(n \* m)**