Lab04

Deadline 11:59PM Oct 7

Suppose we have a file in this format:

3 4
1 0 1 1
0 0 0 1
1 1 1 1

The first two numbers on the first column indicate how many ***rows*** and ***columns*** we have in the next lines. In this example, we know we have 3 more lines. Each line has 4 columns.

Each line (starting from the second line) represents a binary number. Write a C program that takes the name of the input file from the user. Your program should then read the file and process each line. It should then convert each line (starting from the second line) to a number (base 10) and print it to the console. Here are some examples:
File:
3 4
1 0 1 1
0 0 0 1
1 1 1 1

Output (printed on the console):
11
1
15

File:
3 5
1 0 1 0 0
1 1 1 0 0
0 0 0 1 0

Output:
20
28
2

Grading

This lab will be marked out of 9. For full marks this week, you must:

- (1 point) Correctly use git/GitHub and the repository following the lab handout
- (2 points) Generate a correct solution to the problem(s) in this lab
- (4 point) Handling corner cases and gracefully exit

- (2 point) Comment your code

In this lab, a few things to note are:

1. Check for corner cases
2. Comment your code as in the lecture
3. Run command will be ./a.out “<file name>” (assuming that gcc compiled an output to a.out)

Submission Files and Expected Outputs

- Github classroom link is posted on Learning Hub.
- Files to submit
    - lab4.c (do not capitalize)
    - AXXXX.txt (empty file, but with your A number as file name)
    - Only push these two files to Git