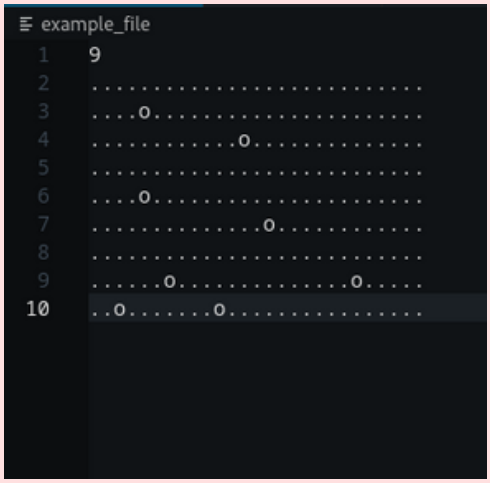
PROJECT PRESENTATION

BSQ - FIND THE BIGGEST SQUARE

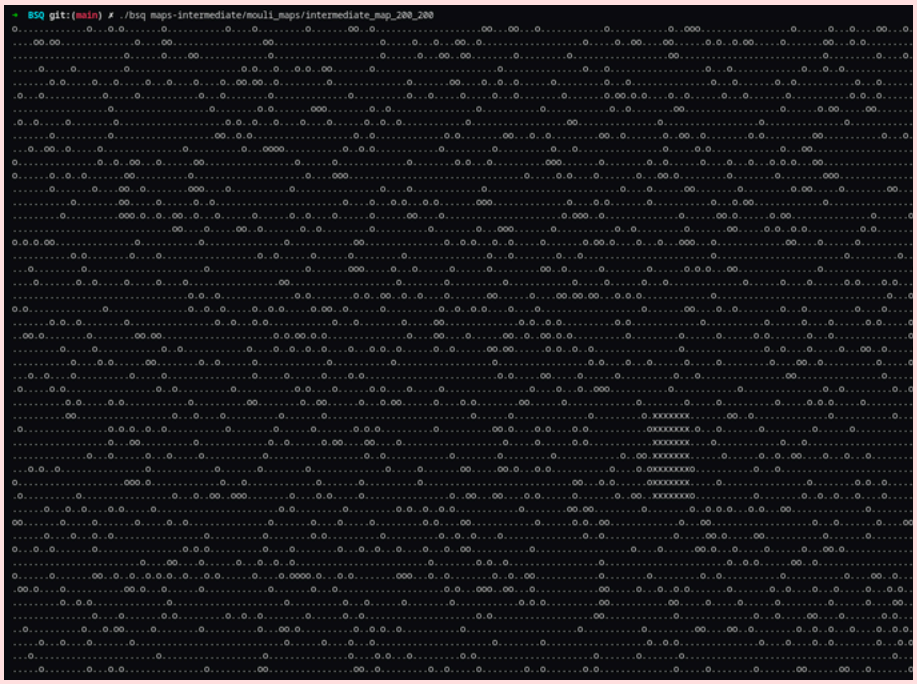
LANGUAGE: C
COMPILATION: MAKEFILE



The goal of this project is to **find the largest possible square on a board** while avoiding obstacles using the **reverse Minesweeper algorithm**.
The board is represented by a file passed as the program's argument.
The file is valid if it is respecting those constraints:

1. Its first line contains the number of lines on the board (and only that).
2. "." (representing an empty place) and "o" (representing an obstacle) are the only two characters for the other lines.
3. All of the lines are of the same length (except the first one),
4. It contains at least one line,
5. Each line is terminated by '\n'.

The program must print the board, with some "." replaced by "x" to represent the largest square you found.



Why I like this project ?

- Solid understanding of **dynamic programming.**
- Mastery of **file handling and input validation in C.**
- Efficient **memory allocation and management.**
- Ability to **break down a problem** into clean modules.
- Insight into **algorithm optimization** and complexity analysis.

Click Here to see the project repository