First semester **C** language project

Brief description

one of the following projects must be selected for its implementation in the C programming language:

1. embedded systems
2. terminal(operative system terminal) game
   - snake game
   - who wants to be a millionaire game
   - Sudoku game
   - guess a word game
3. function approximation library
4. lineal equation system solver
5. differential equation solver

Requirements

1. Original content - you can get inspiration from others people code on internet, however writte most of the code by yourself.
2. A command line interface - all the projects (exeption - the embedded systems project) must have an user interfase that allows the user

interact with the program and get all the functionallities.

3. **Working functionality** - all the funtionallities should work according to the goals of the project
4. **Structured program** - divide the project in chuncks of code using as main criteria the functionalities of the project.
5. **Defense** - all the items in the written report must be explained to the teacher (online or presensial).
6. **Deadline** - sent everything before 20.12.2024

Report

The report is a pdf file which must contain:

1. Information page
   - Project name
   - Students full names
   - Academic group
2. Content page
3. Project goals
   - Main goal
   - Secondary goals
4. Problem or project formulation
5. Solution formulation
   - solving algorithm formulation
   - diagram of the solving algorithm
   - block diagram by functionality
6. Code implementation
   - code explanation by functionality

7. Results
   - code execution example
   - graphical results
8. Conclusions

Final product

The next products must be done, working and sent before the deadline

1. A written report in pdf format.
2. All the `C` code used for the project.