REPORT FOR THE PROJECT – Part 1: Interpreter

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FA22-CSC331502 Languages And Compilers

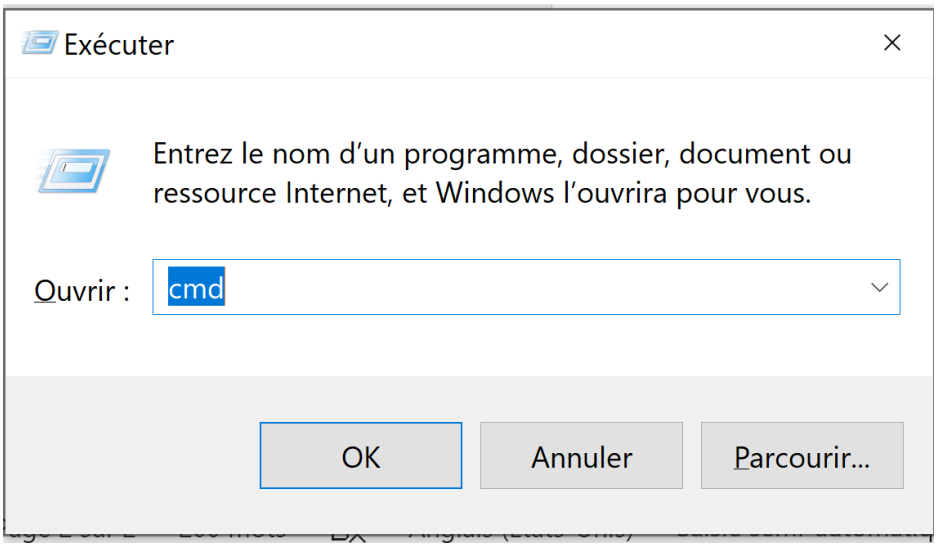
Assumptions we made and general approach:

- We first focused on loading instructions from the file, then focused on creating the appropriate label table and symbol table, and we finished by focusing on the instructions' execution.
- The code was written in separate functions that were called in main and by each other when needed.
- Global variables were used.
- When declaring an array in the instructions' input, the size of the variable must be different than 1, it must be declared as the last variable, and there can only be one array.
- If an operation's result goes out of bound (>999 999 999 or <-999 999 999) it gets sets to the max/min value (999 999 999 or -999 999 999)
- Any instruction besides the loop executes what it jumps to and comes back to continue the sequence of execution. If the instruction is a loop or if the jump is done to a loop, the loop takes over the control of the IP.

Directions for running:

- Input file and main.c should be in the same directory.

- When testing using the test suite, copy from the text files into the input.txt in the directory of the main.
- To execute the code:
    - Use the shortcut for cmd:
        - Press Windows+R
        - The run box will show up
        - Enter cmd and click on ok



- Type cd + "folder's address in your computer"
- Type gcc main.c
- Type a.exe

```
C:\Users\DELL>cd C:\Users\DELL\Desktop\Interpreter Project

C:\Users\DELL\Desktop\Interpreter Project>gcc main.c

C:\Users\DELL\Desktop\Interpreter Project>a.exe
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