

*Individual submission*

Introduction

For the second assignment you will develop a small application – a high-low game - and create a makefile to make the solution portable. The game play is as follows:

- The game begins with the program generating a random number for the user to guess.
- As the user makes guesses, the program tells the user if the guess is too high, too low, or correct
- When the game is won, the game ends

*Do not* use an IDE (like Visual Studio) in the development of this application.

The requirements of the program are stated below.

Minimum Requirements

1. The program is a console program and may be written in C or C++.
2. All related functions should be in *separate* source files.
3. Game functions:
  - a. Create random number
  - b. Determine if guess is too high (return 1), too low (return -1) or correct (return 0)
4. User interface functions:
  - a. Ask the user for a guess and validate it is an integer
  - b. Tell the user the result of the guess
5. No global variables are permitted.
6. The upper limit of the guessing range must be specified by a #define statement
7. Create a makefile early in the development process to enable easy compilation of your program.
8. Modify the makefile (if you didn't do it already) to use appropriate macros to compile the solution on either a Windows or Linux system (Ubuntu preferred). If you need to apply macro definitions specific to a platform, you may do so at the top of the makefile, using comments to control which definitions to use for the specific platform. There should be no references to filenames in the body of the makfile: all filenames should be identified in the macros.

Please submit your solution to the D2L dropbox in a zipped folder. Include only the source files and the final makefile with macros.

NM