ANTHONY CLARK

PROJECT 4 NOTES:

For this weeks project I wanted to make a simple menu that would give the user the following options: 1) Play Number Guess 2) Play Hang Man 3) Play Phrase Guess 4) Exit and play nothing. To present these options, I decided to make a simple output that listed each with their corresponding number, and then prompted the user to make a selection. This made the validation exceptionally simple, because I could just prompt them again if they did not choose a number between 1 and 4. I later decided to add in my tic tac toe game that we had completed from last week, cleaned it up a bit, including adding more end line spacing for readability, correcting for a case where the user would not win on a top right to bottom left diagonal, and then amending the menu to account for the added game.

In order to make the menu functional, I made an if statement for each potential input that the user could select, and within that if statement, I had the corresponding program though would run. In order to get this working, I put each game into its own function, placed the header for that specific program, and the header for any other function that it called, and then did a bit of rewording to make which program was calling which more obvious.

The user then, when they pick the game that they want to play will fall within that function, run it to completion, and then be asked if they would like to play another game. Instead of creating multiple prompts, asking if they want to play the same game or a new one, I decided to display the menu again so that they could skip having to input two values and could just choose what they wanted to do (either play the same game, play a new game, or exit).

While testing my games again to check for any unforeseen errors, I entered a letter for the number guess game, forgetting that at the time we weren't required to check for valid inputs. My program was thrown into an infinite loop, so I went back into my number guess game and added input validation for when the user did not enter a number. I had some trouble with this at first, and continued to cause an infinite loop even when it caught the incorrect input, but I eventually was able to get it to properly tell the user to input a new value by using my new best friend cin.good, in combination with cin.clear and cin.ignore, to test if the value entered wasn't an integer.