

## User-defined Functions Assignment

Modify the high-low game from the Predefined/Built-in Functions assignment so that it has two functions. The `main()` function should prompt for and input two numbers specifying the low and high values of the range of integers from which the computer will randomly choose a number. For instance, if the user enters 1 and 1000, then "secret" numbers in the range 1 through 1000 will be randomly chosen. The `main()` function should then call a second function that chooses a random number in the specified range (the low and high values that were input from the user should be passed as arguments to this function) and allows the user to repeatedly attempt to guess this number, providing suggestions after incorrect guesses as in the earlier program. Once the user has correctly guessed the number, this second function should return to `main()` the number of guesses that were made by the user when attempting to guess the randomly selected number. `main()` then congratulates the user and asks if he or she would like to play again. If so, the second function is again called (the low and high values are only input once at the beginning of the program, so the same range of values is used to select each of the secret numbers). When the user is eventually done playing, the program should output the average number of guesses needed.

The last line of the program should call the `main()` function.

## Grading

- 0: Program does not run or does not define two functions more-or-less as specified above
- 5: Program runs and conforms perfectly with specifications above
- 4: Program runs and is mostly correct but deviates from the above specification in one way
- 3: Program runs and is mostly correct but deviates from the above specification in two ways
- 0: Program deviates from the above specification in three or more ways