a.

Though it was given to us in the specs, a notable obstacle that I endured would be trying to implement the random word aspect into my program. To even begin coding, I had to understand how this implementation worked so I could use it as a parameter when I called my function. I talked to a TA about this and after understanding it, I could begin my code. Then I realized that when I ran my code, it printed out “Probe word: ProbeWord:” and this was because when I declared my function in int main(), I also called it so the program runs twice. I eventually figured it out when I realized that declaring a variable to a function also calls the function. I also struggled on figuring out the isGoldandSilver function as it would look at a letter and match it with both gold and silver or return more silvers there was there. My solution for it would be to completely get rid of the variable by setting the random word and probe word to a temporary variable and everytime it matches with something, it would be replaced with either a ‘\’ or ‘-’. Therefore the character can’t be matched again.

b.

within int main

initialize the word file within an array

ask the user how many rounds they want to play

repeatedly for the amount of rounds the user wants to play

keep track of the round

run function playOneRound

return the tries it took

return the average, minimum, and maximum

define boolean function isInDictionary with parameters cstring 2D array dictionary, cstring array word, and integer n

run through each word in the dictionary

check if the word is there

return boolean value

define void function isGoldandSilver with parameters cstring array words and cstring array probe

set temporary variables for probe and words

repeatedly if words doesn’t match probe

repeatedly compare the character at the index

if the index and character matches

increment gold

replace the character

repeatedly compare the character at the index

if the character matches

increment silver

replace the character

return the amount of golds and silvers

define integer function playOneRound with parameters cstring 2D array words, integer nWords, and integrer wordnum

repeatedly if probe doesn’t match words

ask user to input probe word

checks if it fits the criteria of a probe word

if it doesn’t

set boolean value

return corresponding error message

else

run isGoldandSilver function

increment tries

define void function negativeRounds with paramenter integer numOfRounds

checks if numOfRounds is greater than 0