Report

1. A brief description of obstacles:

When I first run my program, it would “cout” probe word, but not letting me enter anything. Then after debugging, I realize I should have written the line cin.ignore (10000, ‘\n’), because before get the probe word, I enter the number of round. We know that ever time we want to cin a string after an int, we need to use “ignore”.

It is a challenge to figure out the function for pebbles. In order to disregard all the letters in the probe word and the secret word, I created two new strings to hold the remainder of the letters.

1. pseudocode

main routine

get the actual number of the words

if this number is not positive, terminate the program

ask the player how many rounds he wants to play

get number of rounds

if it is not positive, terminate the program

generate a random word

cout round number

tell player the lenth

repeatedly

if intended number of rounds are played, terminate the program

play one round

tell player the number of rounds and statistics(average, min ,max)

ManageOneRound

Repeatedly

get probe word

if the player guess the right word, terminate the function

if the word is not valid, notify the player

if the word is not in the list, notify the player

otherwise tell the player the number of r’s and p’s

increase the number of tries by 1

return number of tries

Rocks

visit ever character in probe word

if we find a matching letter at the same position

increase number of rocks by 1

return number of rocks

Pebbles

Create two new c strings, and store the leftover letters from rock in corresponding string

repeatedly

Visit each letter in the remainder of probe word

repeatedly

Visit each letter in the remainder of secret word

If two letters are the same

Increase the number of pebbles by one

Set the letter in the remainder of secret word to 0

Set the letter in the remainder of probe word to 1

Return number of pebbles