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CS 31

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Project 5 Report

1. Obstacles
   1. Use C++ string expressions in the code
   2. Forgot the header <cstring>
2. pseudocode

Main routine:

Load a word list with getWords function,

If no word loaded:

print "No words were loaded, so I can't play the game.”,

exit the program.

Get the rounds player want to play

If rounds is smaller than 1

print “The number of rounds must be positive.”,

exit the program.

Repeatedly,

print the current round,

generate a random trial word in the word list,

run playOneRound function and return value about the numbers of trials,

if number of trial is 1:

print "You got it in 1 try.”.

else:

print player gets the word in how many round.

add the trials together for sum

find the maximum trial count

find the minimum trial count,

calculate the average by dividing sum and rounds.

print the average, minimum, maximum,

Within the rounds player want to play

playOneRound function:

If the call of the word is outside word list, length of wordlist is smaller than zero,

return -1.

Repeatedly,

get the user input of trial word,

if the user input is not a valid word (wordlen function)

print "Your trial word must be a word of 4 to 6 lower case letters.”,

go back to the beginning of loop.

if the user input is a valid word but not in the word list, (validword function)

print “I don't know that word.”,

go back to the beginning of loop.

if user input is the same as the trial word,

return count.

create a copy of that random trial word,

repeatedly,

if the letter in the copy is same as user input at the same position

flower count + 1,

within the word length (minpos function).

repeatedly,

go through each letter of user input word and trial word within word length,

if match,

bee count +1,

When user did not get the right word.

print the bees and flowers number.

Return count.

wordlen function:

If the word checked is between 4-6 length, and all lower character,

return true.

Otherwise,

return false.

validword function:

Repeatedly,

check the match of each word in the word list with user input,

if match

return true.

Otherwise,

return false.

Within the length of word list.

minpos function

return a smaller number within two number inputs.