

Hangman:

The code starts with a list of all the words that could possibly come up in the game. It's important to know the exact number of words there are. After all the words are the parts of the code that determine what word is going to be used for the game. It starts by choosing a random number from the total number of words and then converting that number into a string that is the selected word. Then the length of the word is determined, and all letters are converted to asterisks which are then displayed to the player. At this point the code begins asking for inputs from the user and keeping track of their misses up to 7. Each miss loads a new picture. If the player reaches 7 misses the game ends and the chosen word is displayed. The code after that keeps track and replaces the asterisks of the letters the user has gotten correct. Once there are no more asterisks the user wins the game and the corresponding image will be shown based on how many misses the user had.

A. a full list of the variables and their uses.

words = the list of words.

num = the number that represents each word.

answer = the selected word.

char = the letters in the answer.

len = the length of the word.

i = the word represented by length

let = the letters in the word after conversion.

Word = the answer in asterix and letter form.

m = this is the number of misses.

ch = the separate characters in the word asterix or otherwise.

n = used to determine if the entered character is correct by being either a one or a zero.

FA = this is the full answer that is displayed if a player loses.

B. a list of the MATLAB commands used with short descriptions.

rand = gives a random value from a vector

ceil = rounds towards positive infinity

length = gives length the length of a vector

for = a loop that repeats for a determined number of times

while = a loop that continues while a criterion is either met or not met

if = a loop that happens while a criterion

else = when the requirements for an if loop are not met this is what the program will go to

break = forces a loop to end early

end = naturally ends the loop

imshow = shows the images whose file name is typed after it

fprintf = prints a message to the command window

