HANGMAN GAME CODE:

#include <stdio.h>

#include <string.h>

#include<ctype.h>

#define MAX\_ATTEMPTS 8

void displayWord(char word[], char guessed[], int length) {

for (int i=0; i<length; i++) {

if (guessed[i]) {

printf("%c ", word[i]);

} else {

printf("\_ ");

}

}

printf("\n");

}

int isWordGuessed(char guessed[], int length) {

for (int i = 0; i < length; i++) {

if (!guessed[i]) {

return 0;

}

}

return 1;

}

int main() {

char word[] = "PROGRAM";

int length = strlen(word);

char guessed[length];

for(int i=0;i<length;i++){

guessed[i]=0;

}

int attempts\_used = 0;

char guess;

printf("Welcome to Hangman!\n");

printf("You have %d attempts to guess the word.\n\n", MAX\_ATTEMPTS);

while (attempts\_used < MAX\_ATTEMPTS) {

printf("Word: ");

displayWord(word, guessed, length);

printf("\nGuess a letter: ");

scanf(" %c", &guess);

guess = toupper(guess);

int found = 0;

for (int i = 0; i < length; i++) {

if (word[i] == guess) {

guessed[i] = 1;

found = 1;

}

}

if (!found) {

attempts\_used ++;

printf("\nIncorrect! You have %d attempts left.\n", MAX\_ATTEMPTS - attempts\_used);

} else {

printf("\nGood guess!\n");

}

if (isWordGuessed(guessed, length)) {

printf("\nCongratulations! You guessed the word: %s\n", word);

return 0;

}

}

printf("\nYou've run out of attempts! The word was: %s\n", word);

printf("Better luck next time!\n");

return 0;

}