# Assignment 5{focp}

# Hangman Game

The **Hangman** game is a word-guessing game where the player has to guess a hidden word by suggesting letters within a certain number of attempts. If the player guesses a letter incorrectly too many times, they "lose" the game.

#include <stdio.h>

#include <string.h>

#include <ctype.h>

int main() {

char word[] = "coding";

char guessedWord[20];

int wordLength = strlen(word);

int attempts = 3;

int correctGuesses = 0;

char guess;

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

guessedWord[i] = '\_';

}

guessedWord[wordLength] = '\0';

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

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

while (attempts > 0 && correctGuesses < wordLength) {

printf("Current word: %s\n", guessedWord);

printf("Enter your guess: ");

scanf(" %c", &guess);

guess = tolower(guess);

int found = 0;

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

if (word[i] == guess && guessedWord[i] == '\_') {

guessedWord[i] = guess;

correctGuesses++;

found = 1;

}

}

if (!found) {

attempts--;

printf("Wrong guess! Attempts remaining: %d\n",

attempts);

} else {

printf("Good guess!\n");

}

}

if (correctGuesses == wordLength) {

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

printf("The Man survives!\n");

} else {

printf("You ran out of attempts! The word was: %s\n",word);

printf("The Man is hanged!\n");

}

return 0;

}

**Rules of Hangman:**

1. The player guesses one letter at a time.
2. If the guessed letter is in the word, it gets revealed in its correct position.
3. If the guessed letter is not in the word, the player loses one of their attempts.
4. The game ends when the player either guesses the word correctly or runs out of attempts.