Assignment 5 (Hangman Game)

```c
#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);
```

```c
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");
    }
```

```c
    }

    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;
}
```