**ASSIGNMENT 5**

**CODE:**

#include <stdio.h>

#include <string.h>

#define MAX\_CHANCES 3

int main() {

char word[] = "hangman";

char guess[100];

char maskedWord[100];

int length = strlen(word);

int chances = MAX\_CHANCES;

int correctGuess;

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

maskedWord[i] = '\_';

}

maskedWord[length] = '\0';

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

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

printf("The word to guess is: %s\n", maskedWord);

while (chances > 0 && strcmp(maskedWord, word) != 0) {

printf("Enter your guess: ");

scanf("%s", guess);

correctGuess = 0;

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

if (word[i] == guess[0]) {

maskedWord[i] = word[i];

correctGuess = 1;

}

}

if (correctGuess) {

printf("Good guess! The word is now: %s\n", maskedWord);

} else {

chances--;

printf("Wrong guess! You have %d chances left.\n", chances);

}

}

if (strcmp(maskedWord, word) == 0) {

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

} else {

printf("Sorry, you've run out of chances. The word was: %s\n", word);

}

return 0;

}