**Assignment – 5**

#include <stdio.h>

#include <string.h>

int main() {

    char word[50];

    char guessed\_word[50];

    int attempts = 3;

    char guess;

    int correct\_guess;

    int word\_length;

    int guessed = 0;

    printf("Word entered by Player 1 to be guessed by Player 2: ");

    scanf("%s", word);

    printf("Guessing of word by Player 2\n");

    word\_length = strlen(word);

    for (int i = 0; i < word\_length; i++) {

        guessed\_word[i] = '\_';

    }

    guessed\_word[word\_length] = '\0';

    printf("Guess the word: %s\n", guessed\_word);

    while (attempts > 0 && !guessed) {

        correct\_guess = 0;

        printf("Enter a letter: ");

        scanf(" %c", &guess);

        for (int i = 0; i < word\_length; i++) {

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

                guessed\_word[i] = guess;

                correct\_guess = 1;

            }

        }

        if (correct\_guess) {

            printf("Correct guess! The word now: %s\n", guessed\_word);

        } else {

            attempts--;

            printf("Incorrect guess! Attempts remaining: %d\n", attempts);

        }

        if (strcmp(word, guessed\_word) == 0) {

            guessed = 1;

        }

    }

    if (guessed) {

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

    } else {

        printf("Sorry, you are out of attempts. The word was: %s\n", word);

        printf("Try Again.\n");

    }

    return 0;

}