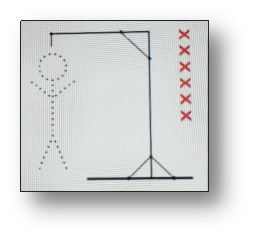
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**ASSIGNMENT-5**

QUES- The Hangman Game is one of the most famous games played on computers.

The Rules of the game are as follows:

1. There is given a word with omitted characters and you need to guess the characters to win the game.

2. Only 3 chances are available and if you win the Man survives or Man gets hanged.

So, it is the game can be easily designed in C language with the basic knowledge of if-else statements, loops, and some other basic statements. The code of the game is easy, short, and user-friendly.

SOL:-

#include <stdio.h>

#include <string.h>

#define MAX\_TRIES 3

#define WORD\_LENGTH 20

void displayHangman(int tries) {

switch (tries) {

case 0: printf(" +---+\n | |\n |\n |\n |\n |\n=========\n"); break;

case 1: printf(" +---+\n | |\n O |\n |\n |\n |\n=========\n"); break;

case 2: printf(" +---+\n | |\n O |\n | |\n |\n |\n=========\n"); break;

case 3: printf(" +---+\n | |\n O |\n /| |\n |\n |\n=========\n"); break;

case 4: printf(" +---+\n | |\n O |\n /|\\ |\n |\n |\n=========\n"); break;

case 5: printf(" +---+\n | |\n O |\n /|\\ |\n / |\n |\n=========\n"); break;

case 6: printf(" +---+\n | |\n O |\n /|\\ |\n / \\ |\n |\n=========\n"); break;

}

}

int main() {

char word[WORD\_LENGTH] = "hangman";

char guessed[WORD\_LENGTH] = {0};

char guess;

int tries = 0, correct = 0;

int word\_length = strlen(word);

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

while (tries < MAX\_TRIES) {

printf("\nCurrent word: ");

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

if (guessed[i]) {

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

} else {

printf("\_ ");

}

}

printf("\n");

displayHangman(tries);

printf("Guess a letter: ");

scanf(" %c", &guess);

int found = 0;

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

if (word[i] == guess && !guessed[i]) {

guessed[i] = 1;

found = 1;

correct++;

}

}

if (!found) {

tries++;

printf("Wrong guess! You have %d tries left.\n", MAX\_TRIES - tries);

}

if (correct == word\_length) {

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

break;

}

}

if (tries == MAX\_TRIES) {

displayHangman(tries);

printf("Game over! The word was: %s\n", word);

}

    return 0;

}