Game Hub

Generated by Doxygen 1.9.6

Chapter 1

Game Hub

Chapter 2

Data Structure Index

2.1 Data Structures

Here are the data structures with brief descriptions:

Chapter 3

File Index

3.1 File List

Here is a list of all files with brief descriptions:

Chapter 4

Data Structure Documentation

4.1 coordinate Struct Reference

```
#include <AdvWorld.h>
```

Data Fields

- int x
- int y
- int direction

4.1.1 Field Documentation

4.1.1.1 direction

```
int direction
```

4.1.1.2 x

```
int x
```

4.1.1.3 y

```
int y
```

The documentation for this struct was generated from the following file:

- AdvWorld.h

Chapter 5

File Documentation

5.1 AdvWorld.h File Reference

This file contains code for the adventurous world.

```
#include <stdio.h>
#include <time.h>
#include <stdlib.h>
#include <conio.h>
#include <ctype.h>
#include <windows.h>
#include <process.h>
#include <unistd.h>
#include <stdbool.h>
#include "finalround.h"
```

Data Structures

- struct coordinate

Macros

- #define UP 72
- #define DOWN 80
- #define LEFT 75
- #define RIGHT 77
- #define NUM_WORDS 18

  for the memory maze
- #define WORD_LENGTH 20
- #define TIME_LIMIT 60

Typedefs

- typedef struct coordinate coordinate

Functions

- void wordgame ()

  Variables to store the star.
- void record ()
- void load ()

  loading animation
- void Delay (long double)
- void Move ()
- void Food ()
- int Score ()
- void r2title ()
- void gotoxy (int x, int y)
- void GotoXY (int x, int y)
- void Bend ()
- void Boarder ()
- void Down ()
- void Left ()
- void About ()
- void Up ()
- void Right ()
- void ExitGame ()
- int Scoreonly ()
- void awtitle ()
- void r1 ()
- void Start ()
- void r1title ()
- void r2abt ()

  GotoXY(10,12);.
- int win (char comp, char p1)

  for rock paper scissors comparision
- int aworld ()
- void Guess ()
- void r3 ()
- void r3abt ()

Variables

- int length
- int bend_no
- int len
- char key
- int life
- char p [20]
- coordinate head
- coordinate bend [500]
- coordinate food
- coordinate body [30]
- int i

  Array to track which words have been used.
- int j
- char words [NUM_WORDS][WORD_LENGTH]
- bool used [NUM_WORDS]

Array to store the words.

- int numCorrect = 0
- char guess [WORD_LENGTH]

  Loop variables and score counter.
- time_t startTime

  Variable to store player's guess.
- time_t endTime

5.1.1 Detailed Description

This file contains code for the adventurous world.

5.1.2 Macro Definition Documentation

5.1.2.1 DOWN

```
#define DOWN 80
```

5.1.2.2 LEFT

```
#define LEFT 75
```

5.1.2.3 NUM_WORDS

```
#define NUM_WORDS 18
```

for the memory maze

5.1.2.4 RIGHT

```
#define RIGHT 77
```

5.1.2.5 TIME_LIMIT

```
#define TIME_LIMIT 60
```

5.1.2.6 UP

```
#define UP 72
```

5.1.2.7 WORD_LENGTH

```
#define WORD_LENGTH 20
```

5.1.3 Typedef Documentation

5.1.3.1 coordinate

```
typedef struct coordinate coordinate
```

5.1.4 Function Documentation

5.1.4.1 About()

```
void About ( )
```

5.1.4.2 aworld()

```
int aworld ( )
```

comparing the score

to generate food coordinates initially

number of extra lives

initialing initial bend coordinate

5.1.4.3 awtitle()

```
void awtitle ( )
```

5.1.4.4 Bend()

```
void Bend ( )
```

GotoXY(bend[i].x,(bend[i].y-j)); printf("∗");

GotoXY((bend[i].x+j),bend[i].y); printf("∗");

((bend[i].x-j),bend[i].y); printf("∗");

5.1.4.5 Boarder()

```
void Boarder ( )
```

displaying food

5.1.4.6 Delay()

```
void Delay (
             long double k )
```

5.1.4.7 Down()

```
void Down ( )
```

5.1.4.8 ExitGame()

```
void ExitGame ( )
```

starts with 4 because it needs minimum 4 element to touch its own body

check's value increases as the coordinates of head is equal to any other body coordinate

5.1.4.9 Food()

```
void Food ( )
```

to create food for the first time coz global variable are initialized with 0

5.1.4.10 gotoxy()

```
void gotoxy (
             int x,
             int y )
```

5.1.4.11 GotoXY()

```
void GotoXY (
             int x,
             int y )
```

5.1.4.12 Guess()

```
void Guess ( )
```

Record the start time

Check if the guess is correct

Update the end time

5.1.4.13 Left()

```
void Left ( )
```

5.1.4.14 load()

```
void load ( )
```

loading animation

5.1.4.15 Move()

```
void Move ( )
```

5.1.4.16 r1()

```
void r1 ( )
```

5.1.4.17 r1title()

```
void r1title ( )
```

5.1.4.18 r2abt()

```
void r2abt ( )
```

GotoXY(10,12);.

5.1.4.19 r2title()

```
void r2title ( )
```

5.1.4.20 r3()

```
void r3 ( )
```

5.1.4.21 r3abt()

```
void r3abt ( )
```

5.1.4.22 record()

```
void record ( )
```

5.1.4.23 Right()

```
void Right ( )
```

GotoXY((head.x-i),head.y);

[len].x=head.x-i; body[len].y=head.y;

5.1.4.24 Score()

```
int Score ( )
```

5.1.4.25 Scoreonly()

```
int Scoreonly ( )
```

5.1.4.26 Start()

```
void Start ( )
```

5.1.4.27 Up()

```
void Up ( )
```

5.1.4.28 win()

```
int win (
             char comp,
             char p1 )
```

for rock paper scissors comparision

5.1.4.29 wordgame()

```
void wordgame ( )
```

Variables to store the star.

Declare variables

Initialize the arrays

Populate the array of words

Print game instructions

Display the words to the player

Wait for 1 second before clearing the screen

Clear the screen

Get player's guesses

Display the player's score

5.1.5 Variable Documentation

5.1.5.1 bend

```
coordinate bend[500]
```

5.1.5.2 bend_no

```
int bend_no
```

5.1.5.3 body

```
coordinate body[30]
```

5.1.5.4 endTime

```
time_t endTime
```

5.1.5.5 food

```
coordinate food
```

5.1.5.6 guess

```
char guess[WORD_LENGTH]
```

Loop variables and score counter.

5.1.5.7 head

```
coordinate head
```

5.1.5.8 i

```
int i
```

Array to track which words have been used.

5.1.5.9 j

```
int j
```

5.1.5.10 key

```
char key
```

5.1.5.11 len

```
int len
```

5.1.5.12 length

```
int length
```

5.1.5.13 life

```
int life
```

5.1.5.14 numCorrect

```
int numCorrect = 0
```

5.1.5.15 p

```
char p[20]
```

5.1.5.16 startTime

```
time_t startTime
```

Variable to store player's guess.

5.1.5.17 used

```
bool used[NUM_WORDS]
```

Array to store the words.

5.1.5.18 words

```
char words[NUM_WORDS][WORD_LENGTH]
```

5.2 AdvWorld.h

Go to the documentation of this file.

```
#include <stdio.h>
#include <time.h>
#include <stdlib.h>
#include <conio.h>
#include <time.h>
#include <ctype.h>
#include <time.h>
#include <windows.h>
#include <process.h>
#include <unistd.h>
#include <stdbool.h>
#include "finalround.h"

#define UP 72
#define DOWN 80
#define LEFT 75
#define RIGHT 77

int length;
int bend_no;
int len;
char key;
void wordgame();
void record();
void load();
int life;
void Delay(long double);
void Move();
void Food();
int Score();
void r2title();
void gotoxy(int x, int y);
void GotoXY(int x, int y);
void Bend();
void Boarder();
void Down();
void Left();
void About();
void Up();
void Right();
void ExitGame();
int Scoreonly();
void awtitle();
void r1();
void Start();
void r1title();
void r2abt();
char p[20];

int generaterandomnuber(int n)
{
    srand(time(NULL));
    return rand() % n;
}
int win(char comp, char p1)
{

    if (comp == p1)
    {
        return -1;
    }
    else if ((comp == ’r’) && (p1 == ’s’))
    {

        return 1;
    }
    else if ((p1 == ’r’) && (comp == ’s’))
    {
        return 0;
    }
    else if ((comp == ’p’) && (p1 == ’r’))
    {

        return 1;
    }
    else if ((p1 == ’p’) && (comp == ’r’))
    {
        return 0;
    }
    else if ((comp == ’s’) && (p1 == ’p’))
    {

        return 1;
    }
    else if ((p1 == ’s’) && (comp == ’p’))
    {
        return 0;
    }
}
struct coordinate
{
    int x;
    int y;
    int direction;
};

typedef struct coordinate coordinate;

coordinate head, bend[500], food, body[30];
int i, j;
int aworld()
{
    system("cls");
    int choice;

    char ch;

    char playerchar, compchar;
    int p1score = 0, compscore = 0;
    int temp;
    char dict[] = {’r’, ’p’, ’s’};
    printf("\n");
    printf("\n");
    printf("\n");

    Sleep(400);
    system("color A");
    printf("\n\n");
    printf("\n\n");
    printf("    !!!!!!!!!! !!!!!!!!   !!!           !!! !!!!!!!!!  !!!!     !!! !!!!!!!!  !!!!
!!! !!!!!!!!!!! !!!   !!!  !!!!!!!!!!    !!!!!!!!!!!  !!!    !!!  !!!!!!!!!   \n");
    printf("    !!!    !!! !!!     !!! !!!         !!!  !!!        !!!!     !!! !!!       !!!!!!
!!!     !!!     !!!   !!!  !!!     !!!   !!!     !!!  !!!    !!!  !!!          \n");
    printf("    !!!    !!! !!!     !!!  !!! 0   0 !!!   !!!        !! !!!   !!! !!!       !!! !!!
!!!     !!!     !!!   !!!  !!!     !!!   !!!     !!!  !!!    !!!  !!!          \n");
    printf("    !!!!!!!!!! !!!     !!!   !!!     !!!    !!!!!!!!   !!! !!!  !!! !!!!!!!   !!!  !!!
!!!     !!!     !!!   !!!  !!!!!!!!!     !!!     !!!  !!!    !!!  !!!!!!!!!   \n");
    printf("    !!!    !!! !!!     !!!    !!!   !!!     !!!        !!!  !!! !!! !!!       !!!   !!!
!!!     !!!     !!!   !!!  !!!    !!!    !!!     !!!  !!!    !!!        !!!   \n");
    printf("    !!!    !!! !!!     !!!     !!! !!!      !!!        !!!   !!!!!! !!!       !!!
!!!!!!     !!!     !!!   !!!  !!!     !!!   !!!     !!!  !!!    !!!        !!!   \n");
    printf("    !!!    !!! !!!!!!!!!        !!!!!     !!!!!!!!!  !!!     !!!! !!!!!!!!  !!!
!!!!!     !!!     !!!!!!!!!  !!!      !!!  !!!!!!!!!!!  !!!!!!!!!!  !!!!!!!!!   \n\n");
    Sleep(800);
    printf("\t\t\t\t\t\t !!!   !!!   !!!  !!!!!!!!!!!!  !!!!!!!!!!!    !!!         !!!!!!!!!!!   !
\n");
    printf("\t\t\t\t\t\t !!!   !!!   !!!  !!!      !!!  !!!     !!!    !!!         !!!      !!!  !
\n");
    printf("\t\t\t\t\t\t !!!   !!!   !!!  !!!      !!!  !!!     !!!    !!!         !!!      !!!  !
\n");
    printf("\t\t\t\t\t\t !!!   !!!   !!!  !!!      !!!  !!!!!!!!!!!    !!!         !!!      !!!  !
\n");
    printf("\t\t\t\t\t\t !!!   !!!   !!!  !!!      !!!  !!!      !!!   !!!         !!!      !!!  !
\n");
    printf("\t\t\t\t\t\t !!!   !!!   !!!  !!!      !!!  !!!       !!!  !!!         !!!      !!!  !
\n");
    printf("\t\t\t\t\t\t !!!!!!!!!!!!!!!  !!!!!!!!!!!!  !!!        !!! !!!!!!!!!!  !!!!!!!!!!!   O
\n");
    Sleep(2000);
    system("cls");
    system("color 4");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");

    About();

    printf("\n\n\n\n\t\t\t\t\t-Enter 1 to join the journey of  the Adventerous world\n\t\t\t\t\t-Enter
2 to quit the game\n");
    printf("\n\n\n\n\n\t\t\t\t\t\t\t\tEnter  : ");
    scanf("%d", &choice);
    fgetc(stdin);
    switch (choice)
    {
    case 1:
        Start();
        break;

    case 2:
        printf("Add function to return the Selecting");
        break;

    default:

        printf("Invalid comand!");
        system("color 1");
        Sleep(1000);
        system("cls");
        main();
    }

    printf("\t\t\t\t \tPress any key to start! ");
    getch();
    system("cls");
    system("color 1");

    r1title();

    printf("\t\t\t\t\t\t\t ___________________________________\n");
    printf("\t\t\t\t\t\t\t|.                                  |\n");
    printf("\t\t\t\t\t\t\t|.    *CHHOOSE 1 FOR ROCK   | 0 |   |\n");
    printf("\t\t\t\t\t\t\t|.                                  |\n");
    printf("\t\t\t\t\t\t\t|.    *CHOOSE  2 FOR PAPER  |/ /|   |\n");
    printf("\t\t\t\t\t\t\t|.                                  |\n");
    printf("\t\t\t\t\t\t\t|.   *CHOOSE  3 FOR SCISSOR |>o |   |\n");
    printf("\t\t\t\t\t\t\t|.                                  |\n");
    printf("\t\t\t\t\t\t\t|.__________________________________|\n");
    printf("\n");
    int i;
    for (i = 0; i < 3; i++)
    {

        printf("\t\t\t%s ’s turn:  ", p);
        scanf("\t\t\t%d", &temp);
        getchar();
        playerchar = dict[temp - 1];
        printf("\t\t\tYou  choose %c \n   ", playerchar);

        printf("\t\t\tcomputer’s turn \n");
        temp = generaterandomnuber(3) + 1;
        compchar = dict[temp - 1];
        printf("\t\t\t Computer choose  %c  \n  ", compchar);

        if (win(compchar, playerchar) == 1)
        {
            compscore += 1;
            printf("\t\t\t\t\t\t\t\t\t\t_________________________\n");
            printf("\t\t\t\t\t\t\t\t\t\t|computer is taking lead |\n ");
            printf("\t\t\t\t\t\t\t\t\t\t|%s= %d \n               |\n", p, p1score);
            printf("\t\t\t\t\t\t\t\t\t\t|computer =%d  \n        |\n", compscore);
            printf("\t\t\t\t\t\t\t\t\t\t|________________________|\n");
            printf("\n");
            printf("\n");
        }
        else if (win(compchar, playerchar) == -1)
        {
            compscore += 1;
            p1score += 1;
            if (p1score == compscore)
            {

                printf("\t\t\t\t\t\t\t\t\t\t_____________________\n");
                printf("\t\t\t\t\t\t\t\t\t\t|Its a draw          |\n ");
                printf("\t\t\t\t\t\t\t\t\t\t|%s= %d \n           |\n", p, p1score);
                printf("\t\t\t\t\t\t\t\t\t\t|computer =%d  \n    |\n", compscore);
                printf("\t\t\t\t\t\t\t\t\t\t|____________________|\n");
                printf("\n");
                printf("\n");
            }
            else if (p1score > compscore)
            {
                printf("\t\t\t\t\t\t\t\t\t\t\t\t__________________________\n");
                printf("\t\t\t\t\t\t\t\t\t\t\t\t|you ARE TAKING THE LEAD  |\n ");
                printf("\t\t\t\t\t\t\t\t\t\t\t\t|%s= %d                   |\n", p, p1score);
                printf("\t\t\t\t\t\t\t\t\t\t\t\t|computer =%d             |\n ", compscore);
                printf("\t\t\t\t\t\t\t\t\t\t\t\t|_________________________|\n");
                printf("\n");
                printf("\n");
            }
            else
            {
                printf("\t\t\t\t\t\t\t\t\t\t\t\t _____________________________\n");
                printf("\t\t\t\t\t\t\t\t\t\t\t\t|COMPUTER IS TAKING THE LEAD  |\n ");
                printf("\t\t\t\t\t\t\t\t\t\t\t\t|%s= %d                       |\n ", p, p1score);
                printf("\t\t\t\t\t\t\t\t\t\t\t\t|computer =%d                 |\n ", compscore);
                printf("\t\t\t\t\t\t\t\t\t\t\t\t|_____________________________|\n");
                printf("\n");
                printf("\n");
            }
        }

        else
        {
            p1score += 1;
            printf("\t\t\t\t\t\t\t\t\t\t\t\t _________________________\n");
            printf("\t\t\t\t\t\t\t\t\t\t\t\t|You are taking lead      |\n ");
            printf("\t\t\t\t\t\t\t\t\t\t\t\t|%s= %d                   |\n ", p, p1score);
            printf("\t\t\t\t\t\t\t\t\t\t\t\t|computer =%d             |\n ", compscore);
            printf("\t\t\t\t\t\t\t\t\t\t\t\t|_________________________|\n");
        }
    }
    Sleep(500);
    system("cls");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\t_________Total Score_______\n");
    printf("\t|%s’s score=%d            |\n", p, p1score);
    printf("\t|comp score=%d            |\n", compscore);
    printf("\t|_________________________|\n");
    if (p1score > compscore || p1score == compscore)
    {
        system("color 2");
        Sleep(700);
        printf("\n");
        printf("\n");

        printf("\t_______________________________________(: *|C | O | N | G | R | A | T | U | L | A| T
| I | O | N | S|* :)_______________________________________\n");
        printf("\n");
        Sleep(700);
        printf("\t\t\tCongratulations, you have won the first round of the Round of Luck!\n");
        Sleep(700);
        printf("\t\t\tIt looks like luck was on your side this time. You  have earned the right to
continue on to the next round.\n");
        printf("\t\t\tGood luck as you progress through the rest of the game!\n");
        Sleep(700);
        printf("\t\t\tThank you for playing and we hope you have a great time in Adventurous
World.\n");
        Sleep(700);

        printf("\n");
        Sleep(700);
        printf("\t\t\tTo continue to the next round, simply press any key on your keyboard......\n");
        if (getch() == 27)
            exit(0);

        system("cls");

        char key;

        r2abt();

        system("cls");

        length = 5;

        head.x = 25;

        head.y = 20;

        head.direction = RIGHT;

        Boarder();

        Food();

        life = 3;

        bend[0] = head;

        Move();
    }
    else
    {
        Sleep(700);
        printf("\n");
        printf("\n");
        printf("\n\n");


printf("\t\t_____________________________________________(::::*SAD!!:::::)_____________________________________________
        printf("\n\n");
        printf("\t\t\t\tUnfortunately, you have been eliminated from the Round of Luck
\n ");
        printf("\t\t\t\tand will not be able to progress to any further levels in Adventurous World.
\n ");
        printf("\t\t\t\t Better luck next time! Thank you for playing, and we hope you had fun.
\n ");
        printf("\t\t\t\t  We hope to see you again soon for another exciting adventure!
\n ");
        printf("\n");
        Sleep(5000);
        system("cls");
        main();
    }

    return 0;
}
void r1title()
{
    system("color 0b");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    Sleep(700);

    printf("\t\t\t\t  ::::::   :::::: ::   :: ::     :: ::::::     :::::: ::::::    ::      ::  ::
::::::: ::  ::           \n");
    printf("\t\t\t\t  ::  ::   ::  :: ::   :: :: ::  :: ::   ::    ::  :: ::        ::      ::  :: ::
```

```
::  ::                \n");
    printf("\t\t\t\t  ::::::   ::  :: ::  :: ::  :: :: ::   :: __ ::  :: :::::: __ ::     ::  :: ::
::::                  \n");
    printf("\t\t\t\t  ::   ::  ::  :: ::  :: ::   :::: ::   ::    ::  :: ::        ::     ::  :: ::
::  ::              \n");
    printf("\t\t\t\t  ::    :: :::::: :::::: ::     :: ::::::     :::::: ::        :::::: :::::: ::
:::: ::   ::               \n");
    printf("\t\t\t\t
___________________________________________________________________________________________\n");
    printf("\n");
    printf("\n");
}
void r1()
{
    Sleep(800);
    system("color 9");
    printf("\t\t\t Welcome %s to the  First Round of Luck level of Adventurous World! \n  ", p);
    Sleep(500);
    printf("\t\t\t In this classic game of scissor, paper, rock, you'll face off against the computer
in a series of rounds\n .");
    Sleep(500);
    printf("\t\t\t The rules are simple: scissor beats paper, paper beats rock, and rock beats
scissor. \n ");
    Sleep(500);
    printf("\t\t\t If you win or draw against the computer, you'll move on to the next round.\n ");

    printf("\n");
    Sleep(500);
    printf("\t\t\t Can you outsmart the computer and emerge victorious in the Round of Luck? Let's
find out! Good luck and have fun! \n \n ");
    printf("\n");
    Sleep(500);
    printf("\n");
}
void Start()
{
    system("cls");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    Sleep(700);
    printf("\t\t\t\t\t\t\t\tGreetings adventurer!! \n ");
    printf("\n\n");
    printf("\n\n");
    Sleep(700);
    printf("\t\t\t\t\tBefore we begin our journey through the Adventurous World,\n ");
    Sleep(700);
    printf("\t\t\t\t\tplease tell us your name so we may properly address you on your journey:   ");
    scanf(" \t %s", p);
    system("cls");

    r1title();
    r1();
}
void About()
{

    printf("\t\t\t___________________________________________________ABOUT THE
GAME____________________________________________________________\n");
    printf("\n");
    printf("\n");
    Sleep(700);
    fflush(stdout);
    printf("\t\t\t Welcome to the Adventurous World,A place where you will embark on a journey of
challenges and penalties,                                  \n");
    Sleep(700);
    printf("\t\t\t where you will struggle and overcome to come out victorious.
\n \n");
    Sleep(1000);
    fflush(stdout);
    printf("\t\t\t As you enter this world, you will be facing rounds of diverse games, each one
designed                                               \n");
    Sleep(700);
    printf("\t\t\t to test different skills and abilities
\n");
    Sleep(700);
    printf("\t\t\t Each round you pass will bring you closer to the ultimate goal of completing the
adventure.                              \n \n");
    fflush(stdout);
    Sleep(1000);
    printf("\t\t\t As you proceed through the rounds, you will encounter unknown territories and
unexpected obstacles.           \n");
    Sleep(700);
    printf("\t\t\t So Be ready to face new challenges, and adapt to changing situations as you
navigate your way through this exciting game          \n");
    Sleep(700);
    printf("\t\t\t be ware, one wrong move could lead to elimination,  So stay sharp  !
\n");
    Sleep(1000);
    fflush(stdout);
    printf("\n  ");
    printf("\n");

    printf("\t\t\t Are you ready to test your skills and luck in a series of challenging and exciting
rounds?                                            \n ");
    Sleep(700);
    printf("\t\t\t Play now and see just how far you can go!
\n ");
    Sleep(700);

    printf("\n");
    printf("\n");

printf("\t\t\t________________________________________________________________________________________________
}

void Move()
{
    int a, i;

    do
    {

        Food();
        fflush(stdin);

        len = 0;

        for (i = 0; i < 30; i++)

        {

            body[i].x = 0;

            body[i].y = 0;

            if (i == length)

                break;
        }

        Delay(length);

        Boarder();

        if (head.direction == RIGHT)

            Right();

        else if (head.direction == LEFT)

            Left();

        else if (head.direction == DOWN)

            Down();

        else if (head.direction == UP)

            Up();

        ExitGame();

    } while (!kbhit());

    a = getch();

    if (a == 27)

    {

        system("cls");

        exit(0);
    }
    key = getch();

    if ((key == RIGHT && head.direction != LEFT && head.direction != RIGHT) || (key == LEFT && head.direction != RIGHT && head.direction != LEFT) || (key == UP && head.direction != DOWN && head.direction != UP) || (key == DOWN && head.direction != UP && head.direction != DOWN))

    {

        bend_no++;

        bend[bend_no] = head;

        head.direction = key;

        if (key == UP)

            head.y--;

        if (key == DOWN)

            head.y++;

        if (key == RIGHT)

            head.x++;

        if (key == LEFT)

            head.x--;

        Move();
    }

    else if (key == 27)

    {

        system("cls");

        exit(0);
    }

    else

    {

        printf("\a");

        Move();
    }
}

void gotoxy(int x, int y)
{

    COORD coord;

    coord.X = x;

    coord.Y = y;

    SetConsoleCursorPosition(GetStdHandle(STD_OUTPUT_HANDLE), coord);
}
void GotoXY(int x, int y)
{
    HANDLE a;
    COORD b;
    fflush(stdout);
    b.X = x;
    b.Y = y;
    a = GetStdHandle(STD_OUTPUT_HANDLE);
    SetConsoleCursorPosition(a, b);
}

void Down()
{
    int i;
    for (i = 0; i <= (head.y - bend[bend_no].y) && len < length; i++)
    {
        GotoXY(head.x, head.y - i);
        {
            if (len == 0)
                printf("v");
            else
                printf("=");
        }
        body[len].x = head.x;
        body[len].y = head.y - i;
        len++;
    }
    Bend();
    if (!kbhit())
        head.y++;
}
void Delay(long double k)
{
    Score();
    long double i;
    for (i = 0; i <= (10000000); i++)
        ;
}
void ExitGame()
{
    int i, check = 0;
    for (i = 4; i < length; i++)
    {
        if (body[0].x == body[i].x && body[0].y == body[i].y)
        {
            check++;
        }
        if (i == length || check != 0)
            break;
    }
    if (head.x <= 10 || head.x >= 70 || head.y <= 10 || head.y >= 30 || check != 0)
    {
        life--;
        if (life > 0)
        {
            head.x = 25;
            head.y = 20;
            bend_no = 0;
            head.direction = RIGHT;
            Move();
        }
        else
        {
            printf("\t\t\t\tYou have no more life! ");
            system("cls");

            if (Scoreonly() > 9)
            {
                system("color 2");
                Sleep(500);
                printf("\n");
                printf("\n");

                printf("\t __________________________________________(: *|C | O | N | G | R | A | T | U | L | A| T | I | O | N | S|* :)__________________________________________________\n");
                printf("\n");
                Sleep(700);
                printf("\t\t\tCongratulations on winning the Round of Hunger!\n");
                Sleep(700);
                printf("\t\t\tYou have proven yourself to be a skilled player and \n");
                Sleep(700);
                printf("\t\t\t\thave earned the right to move on to the next round of the game.\n");
                Sleep(700);
                printf("\t\t\tYour strategy and quick move have paid off, and you should be proud of your accomplishment.\n");
                Sleep(700);
                printf("\t\t\tYou have successfully hunted enough food to move on to the next round, and we look forward to seeing you there.\n");
                Sleep(700);
                printf("\t\t\tWe hope you have a great time in the rest of Adventurous World and\n");
                Sleep(700);
                printf("\t\t\tWish you the best of luck as you progress through the game. Well done!\n");
                Sleep(1000);
                printf("\n \n ");

                printf("\t\t\tAre you ready to face the new round ?? \n \n");
                Sleep(500);

                printf("\t\t\t\tpress any key for next round\n");
                getch();

                system("cls");
                system("color 3");
                wordgame();
            }

            else
            {

                Sleep(700);
                printf("\n");
                printf("\n");

printf("\t________________________________________________________________(::::*SAD!!:::::)____________________________
                printf("\t\t\tUnfortunately, you have been eliminated from the Round of Hunger \n");
                printf("\t\t\tbecause you were unable to hunt enough food to move on to the next round\n");
                printf("\t\t\tWhile it is unfortunate that you were unable to progress further in the game,\n");
                printf("\t\t\twe hope that you have enjoyed your time in Adventurous World and appreciate your participation\n");
                printf("\t\t\tThank you for playing, and we hope you will have the opportunity to try again in the future.\n");
                printf("\t\t\tBetter luck next time!\n");
                printf("\t\t\t\n");
                Sleep(5000);
                main();
            }
        }
    }
}

void Food()
{
    if (head.x == food.x && head.y == food.y)
    {
        length++;
        time_t a;
        a = time(0);
        srand(a);
        food.x = rand() % 70;
        if (food.x <= 10)
            food.x += 11;
        food.y = rand() % 30;
        if (food.y <= 10)

            food.y += 11;
    }
    else if (food.x == 0)
    {
        food.x = rand() % 70;
        if (food.x <= 10)
            food.x += 11;
        food.y = rand() % 30;
        if (food.y <= 10)
            food.y += 11;
    }
}
void Left()
{
    int i;
    for (i = 0; i <= (bend[bend_no].x - head.x) && len < length; i++)
    {
        GotoXY((head.x + i), head.y);
        {
            if (len == 0)
                printf("<");
            else
                printf("=");
        }
        body[len].x = head.x + i;
        body[len].y = head.y;
        len++;
    }
    Bend();
    if (!kbhit())
        head.x--;
}
void Right()
{
    int i;
    for (i = 0; i <= (head.x - bend[bend_no].x) && len < length; i++)
    {
        body[len].x = head.x - i;
        body[len].y = head.y;
        GotoXY(body[len].x, body[len].y);
        {
            if (len == 0)
                printf(">");
            else
                printf("=");
        }
        len++;
    }
    Bend();
    if (!kbhit())
        head.x++;
}
void Bend()
{
    int i, j, diff;
    for (i = bend_no; i >= 0 && len < length; i--)
    {
        if (bend[i].x == bend[i - 1].x)
        {
            diff = bend[i].y - bend[i - 1].y;
            if (diff < 0)
                for (j = 1; j <= (-diff); j++)
                {
                    body[len].x = bend[i].x;
                    body[len].y = bend[i].y + j;
                    GotoXY(body[len].x, body[len].y);
                    printf("*");
                    len++;
                    if (len == length)
                        break;
                }
            else if (diff > 0)
                for (j = 1; j <= diff; j++)
                {
                    body[len].x = bend[i].x;
                    body[len].y = bend[i].y - j;
                    GotoXY(body[len].x, body[len].y);
                    printf("*");
                    len++;
                    if (len == length)
                        break;
                }
        }
        else if (bend[i].y == bend[i - 1].y)
        {
            diff = bend[i].x - bend[i - 1].x;
            if (diff < 0)
                for (j = 1; j <= (-diff) && len < length; j++)
                {
                    body[len].x = bend[i].x + j;
                    body[len].y = bend[i].y;
                    GotoXY(body[len].x, body[len].y);
                    printf("*");
                    len++;
                    if (len == length)
                        break;
                }
            else if (diff > 0)
                for (j = 1; j <= diff && len < length; j++)
                {
                    body[len].x = bend[i].x - j;
                    body[len].y = bend[i].y;
                    GotoXY(body[len].x, body[len].y);
                    printf("*");
                    len++;
                    if (len == length)
                        break;
                }
        }
    }
}
void Boarder()
{
    system("cls");
    int i;
    GotoXY(food.x, food.y);
    printf("O");
    for (i = 10; i < 71; i++)
    {
        GotoXY(i, 10);
        printf("!");
        GotoXY(i, 30);
        printf("!");
    }
    for (i = 10; i < 31; i++)
    {
        GotoXY(10, i);
        printf("!");
        GotoXY(70, i);
        printf("!");
    }
}
void r2title()
{
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    Sleep(700);

    system("color C");
    printf("\t\t\t ::::::    :::::: ::  :: ::     :: ::::::     :::::: ::::::    ::   :: ::  :: ::
:: ::::::     :::::: ::::::   \n");
    printf("\t\t\t ::  ::    ::  :: ::  :: :: ::  :: ::   ::    ::  :: ::        ::   :: ::  :: :: ::
:: ::         ::     ::  ::     \n");
    printf("\t\t\t ::::::    ::  :: ::  :: ::  :: :: ::   :: __ ::  :: :::::: __ ::::::: ::  :: ::  ::
:: ::  :::::: :::::: ::::::                \n");
    printf("\t\t\t ::   ::   ::  :: ::  :: ::   :::: ::   ::    ::  :: ::        ::   :: ::  :: ::
:::: ::  ::  :: ::     ::   ::     \n");
    printf("\t\t\t ::    ::  :::::: :::::: ::     :: ::::::     :::::: ::        ::   :: :::::: ::
:: ::::::  :: :::::: ::    ::       \n");
    printf("\t\t\t
___________________________________________________________________________________________________________________\n");
    printf("\n");
    printf("\n");
}

void r2abt()
{
    Sleep(800);
    r2title();
    printf("\t\t\t Welcome %s  to the Round of Hunger! \n  ", p);
    Sleep(700);
    printf("\t\t\t In this round, you will take control of a snake and guide it through a series of
obstacles, \n ");
    Sleep(700);
    printf("\t\t\t collecting food along the way to keep its hunger at bay. As the snake grows longer,
\n ");
    Sleep(700);
    printf("\t\t\t it will become more difficult to navigate through the obstacles and avoid running
into walls or its own body.\n ");
    Sleep(700);
    printf("\n ");
    printf("\n ");
    printf("\n ");

    Sleep(500);
    printf("\t\t\tCONDITION:\n  ");
    Sleep(500);
    printf("\t\t\tIn this round, you are given three lives and   \n  ");
    Sleep(500);
    printf("\t\t\tmust score at least 10 points in order to move on to the next round.  \n  ");
    Sleep(500);
    printf("\t\t\tIf you are unable to score 10 points before losing all three of your lives,  \n ");
    Sleep(500);
    printf("\t\t\tyou will be eliminated from the game. \n  ");
    printf("\n");

    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    Sleep(500);
    printf("\t\t\t Be sure to use your skills and strategy to your advantage and \n ");
    Sleep(500);
    printf("\t\t\tdo your best to earn a place in the next round of the game.\n ");
    Sleep(500);
    printf("\t\t\tGood luck, and we hope you have a great time in the Round of Hunger!\n ");

    Sleep(500);
    printf("\n");
    printf("\n");
    printf("\t\t\tPress any key to go");
    getch();

    system("cls");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    Sleep(700);
    printf("\t\t\tThe game is starting now!..................... \n \n");
    Sleep(700);
    printf("\t\t\tUse the arrow keys to control the movement of the snake \n \n ");
    Sleep(700);
    printf("\t\t\tpress any key if you need to hold the snake \n \n ");
    Sleep(700);
    printf("\t\t\tThe snake will be moving quickly, so be ready to react and make sharp turns as
needed. \n ");

```

```
    Sleep(4000);
    system("cls");
}

int Score()
{
    int score;
    GotoXY(20, 8);
    score = length - 5;
    printf("SCORE : %d", (length - 5));
    score = length - 5;
    GotoXY(50, 8);
    printf("Life : %d", life);
    return score;
}
int Scoreonly()
{
    int score = Score();
    system("cls");
    return score;
}
void Up()
{
    int i;
    for (i = 0; i <= (bend[bend_no].y - head.y) && len < length; i++)
    {
        GotoXY(head.x, head.y + i);
        {
            if (len == 0)
                printf("^");
            else
                printf("=");
        }
        body[len].x = head.x;
        body[len].y = head.y + i;
        len++;
    }
    Bend();
    if (!kbhit())
        head.y--;
}

#define NUM_WORDS 18
#define WORD_LENGTH 20
#define TIME_LIMIT 60

char words[NUM_WORDS][WORD_LENGTH];
bool used[NUM_WORDS];
int i, j, numCorrect = 0;
char guess[WORD_LENGTH];
time_t startTime, endTime;

void wordgame()
{
    void Guess();
    void r3();
    void r3abt();



    for (i = 0; i < NUM_WORDS; i++)
    {
        used[i] = false;
    }

    strcpy(words[0], "computer");
    strcpy(words[1], "banana");
    strcpy(words[2], "shoes");
    strcpy(words[3], "pencil");
    strcpy(words[4], "pen");
    strcpy(words[5], "momo");
    strcpy(words[6], "hammer");
    strcpy(words[7], "book");
    strcpy(words[8], "keyboard");
    strcpy(words[10], "math");
    strcpy(words[11], "mother");
    strcpy(words[12], "brush");
    strcpy(words[13], "crush");
    strcpy(words[14], "marker");
    strcpy(words[15], "glass");
    strcpy(words[16], "fan");
    strcpy(words[17], "corona");
    strcpy(words[18], "blanket");

    ;
    Sleep(300);
    r3();
    Sleep(500);
    r3abt();

    printf("\n");

    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    r3();
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    Sleep(700);
    printf("\t\t\tGet ready! The words you need to remember will now be presented. \n");
    Sleep(700);
    printf("\t\t\tPay close attention, \n ");
    Sleep(700);
    printf("\t\t\tAs you only have a few seconds to absorb the information before they disappear. \n ");

    Sleep(3000);
    system("cls");

    printf("_____________________________________________________________________________Presenting the Words_____________________________________________________________________ \n");
    Sleep(500);
    printf("\n");
    for (i = 0; i < NUM_WORDS; i++)
    {
        Sleep(1000);
        printf("%s \n \n ", words[i]);
    }
    printf(" \n");
    sleep(3);
    system("cls");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");

    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\t\t\t your time is being started............\n \n");
    printf("\t\t\t Recall your mind!!\n \n");
    printf("\t\t\t Be ready with your hands on keyboard!! \n \n ");
    printf("\t\t\t Press enter to Enter next word! \n \n ");
    Sleep(4000);
    system("cls");
    Guess();

}
void Guess()
{
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    Sleep(500);
    printf("\t \t\t\t\t\t Your time is running out! Quickly enter the words you have retained  \n \n \n  ");
    Sleep(200);

    time(&startTime);
    do
    {
        printf("\t  \t\t\t Your word  :  ");
        scanf("%s", guess);
        printf("\n");

        for (j = 0; j < NUM_WORDS; j++)
        {
            if (!used[j] && strcmp(guess, words[j]) == 0)
            {
                numCorrect++;
                used[j] = true;
                break;
            }
        }
        time(&endTime);
    } while (difftime(endTime, startTime) <= TIME_LIMIT);
    printf("\t\t\tYour time is over \n \n  your are succesful to guess   %d Words ", numCorrect);
    if (numCorrect > 9)

    {
        system("cls");
        system("color 2");
        Sleep(500);
        printf("\n");
        printf("\n");

        printf("\t_________________________________________(: *|C | O | N | G | R | A | T | U | L | A|
T | I | O | N | S|* :)________________________________________________________\n");
        printf("\n");
        Sleep(700);
        printf("\t\t\t\tCongratulations on winning the Meomory maze!\n");
        Sleep(700);
        printf("\t\t\t\tYour quick recall and sharp memory have earned you a spot in the next
challenge. \n");
        Sleep(700);
        printf("\t\t\t\t\n");
        Sleep(700);
        printf("\t\t\t\tKeep up the good work and best of luck as you continue on your adventurous
journey.\n");
        Sleep(700);
        printf("\n \n ");

        printf("\t\t\t\tAre you ready to face the new round ?? \n \n");
        Sleep(500);

        printf("\t\t\t\tpress any key for next round\n");
        getch();
        system("cls");
        final();
    }

    else
    {
        system("cls");
        Sleep(700);
        printf("\n");
        printf("\n");


printf("\t_________________________________________________________________(::::*SAD!!:::::)___________________________
        printf("\n\n");
        printf("\t\t\t\tUnfortunately, you were not able to recall enough words in the Memory Maze
round .\n");
        printf("\t\t\t\tBut don’t be discouraged, every failure is a stepping stone to success\n");
        printf("\t\t\t\tTake this as an opportunity to improve your memory skills and come back
stronger next time. \n");
        printf("\t\t\t\tWe hope you had a great experience and enjoyed the challenge. \n");

        printf("\t\t\t\tBetter luck next time!\n");
        printf("\t\t\t\t\n");
        Sleep(5000);
        main();
    }
    Sleep(6000);
    system("cls");
    main();
}
void r3()
{
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");

    printf("\t\t\t ##          ##   #####   ##         ##   ######   ## ## ##     ##     ##        ##
##   ## ## ##   ## ## ##    ######     \n");
    printf("\t\t\t ## ##    ## ##   ##      ## ##   ## ##   ##  ##   ##    ##       ##  ##         ##
##   ## ##   ##    ##        ##     ##         \n");
    printf("\t\t\t ##    ##    ##   #####   ##   ##    ##   ##  ##   ## ## ##         ##   _____   ##
##   ##   ## ## ##       ##      ######     \n");
    printf("\t\t\t ##          ##   ##      ##         ##   ##  ##   ##     ##       ##            ##
##   ##    ##      ##       ##         \n");
    printf("\t\t\t ##          ##   #####   ##         ##   ######   ##       ##    ##             ##
##   ##    ##    ## ## ##   ######     \n");
```

```
    printf("\t\t\t\t
________________________________________________________________________________________________________________________
    printf("\n");
    printf("\n");
}
void r3abt()
{
    Sleep(800);
    printf("\t\t\tWelcome  %s to the Round of Memory Maze! In this round, \n", p);
    Sleep(800);
    printf("\t\t\tyou will be presented with a series of words in sequence.  \n");
    Sleep(800);
    printf("\t\t\tYour task is to try to remember as many of the words as possible.\n");
    Sleep(800);
    printf("\n");
    printf("\n");
    printf("\n");
    Sleep(500);
    printf("\t\t\t-----------------------------------Rules:----------------------------- \n \n");
    Sleep(600);
    printf("\t\t\t->After all the words have been presented, they will be removed from view and
\n\n");
    Sleep(500);
    printf("\t\t\t->You will then have 60 seconds to enter as many of the words as you can recall.\n
\n");
    Sleep(500);
    printf("\t\t\t->The more words you remember, the higher your score will be. \n \n");
    Sleep(500);
    printf("\t\t\t->If you are able to guess at least 10 words correctly,\n \n");
    Sleep(500);
    printf("\t\t\t you will advance to the next round in your journey through Adventurous \n \n");
    Sleep(500);
    printf("\n");
    printf("\t\t\tGood luck and have fun in the Memory Maze!\n \n");
    printf("\t\t\tSimply press any key to start the Meomory maze");

    getch();
    system("cls");

    system("cls");
}
```

5.3 byby.h File Reference

This file has the code that says goodbye to the players.

```
#include <stdio.h>
#include <windows.h>
```

Functions

- int byby ()

5.3.1 Detailed Description

This file has the code that says goodbye to the players.

See also

byby()

5.3.2 Function Documentation

5.3.2.1 byby()

```
int byby ( )
```

5.4 byby.h

Go to the documentation of this file.

```
#include <stdio.h>
#include <windows.h>

int byby()
{
    system("color D");
    printf("\n\n\n");
    printf("\n\n\n");
    printf("\n\n\n");
    printf("\n\n\n");
    printf("\n\n\n");
    printf("\t\t\t\t\t\t\t\t*****************************************\n");
    printf("\t\t\t\t\t\t\t\t*                                       *\n");
    printf("\t\t\t\t\t\t\t\t*    Thanks for playing! We hope you    *\n");
    printf("\t\t\t\t\t\t\t\t*    had fun and learned something new. *\n");
    printf("\t\t\t\t\t\t\t\t*          See you next time!           *\n");
    printf("\t\t\t\t\t\t\t\t*                                       *\n");
    printf("\t\t\t\t\t\t\t\t*      Keep Learning Keep Exploring !!  *\n");
    printf("\t\t\t\t\t\t\t\t*---------------------------------------*\n");
    printf("\t\t\t\t\t\t\t\t*               (GAME-HuB)              *\n");
    printf("\t\t\t\t\t\t\t\t*****************************************\n");
    printf("\n\n\n");
    printf("\n\n\n");
    printf("\n\n\n");
    printf("\n\n\n");
    printf("\n\n\n");
    printf("\n\n\n");
    printf("\n\n\n");
    printf("\n\n\n");
    printf("\n\n\n");
    printf("\n\n\n");
    printf("\n\n\n");
    printf("\n\n\n");

    return 0;
}
```

5.5 Congrats.h File Reference

This file congratulates the user. After wining all the round.

```
#include <stdio.h>
#include <windows.h>
#include <conio.h>
```

Functions

- int congrats ()

5.5.1 Detailed Description

This file congratulates the user. After wining all the round.

See also

congrats()

5.5.2 Function Documentation

5.5.2.1 congrats()

```
int congrats ( )
```

change text color to green

change text size to bigger

reset text format

5.6 Congrats.h

Go to the documentation of this file.

```
#include <stdio.h>
#include <windows.h>
#include <conio.h>

int congrats()
{
    system("color A");
    printf("\n ");
    printf("\n ");
    printf("\n ");
    printf("\n ");
    printf("\n ");
    printf("\n ");
    Sleep(700);
    system("color A");
    printf("\033[1;32m");
    printf("\033[1;37m");
    system("color A");
    printf("\t\t\t&&&&&&&& &&&&&& &&     && &&&&&&&&   &&&&&&   &&&&&&& &&&&&& &&  && &&     &&&&&&&
&&&&&& &&&&&& &&&&&& &&&&&& &&      &&   &\n");
    printf("\t\t\t&&       &&  && &&  &   && &&         &&  &&   &&   &&   &&   &&  && &&     &&   &&
&&   &&  &&   &&   &&  && &&  &    &&   &  \n");
    printf("\t\t\t&&       &&  && &&   &  && &&   &&&&& &&&&&&   &&&&&&&   &&   &&  && &&     &&&&&&&
&&   &&  &&   &&   &&  && &&   &  &&   &     \n");
    printf("\t\t\t&&       &&  && &&     && &&   && && &&   &&  &&   &&   &&   &&  && &&     &&   &&
&&   &&  &&   &&   &&  && &&      &&   &     \n");
    printf("\t\t\t&&&&&&&& &&&&&& &&     && &&&&&&& && &&    && &&   &&   &&   &&&&&& &&&&&& &&   &&
&&   &&&&&& &&&&&& &&&&&& &&      &&   O \n\n");

printf("\t\t**************************************************************************************************************
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");

    printf("\n");
    printf("\033[0m");
    system("color 2");
    printf("\t\t\tCongratulations!!, the adventure Hero on completing the journey of Adventurous
World!\n");
    Sleep(700);
    printf("\t\t\tyou have faced many challenges and obstacles throughout this journey, but you have
proven to be a skilled and determined player.\n ");
    Sleep(700);
    printf("\t\t\tYour success in this game is a reflection of your strength and resilience in the
face of adversity.\n");
    Sleep(700);
    printf("\t\t\tRemember that life is full of ups and downs, but with perseverance and
determination, you can overcome any obstacle and achieve your goals \n");
    Sleep(700);
    printf("\t\t\tWe hope that this game has inspired you to believe in yourself and to embrace the
challenges that come your way. \n \n \n");
    Sleep(700);
    printf("\t\t\tThank you for playing Adventurous World, and we hope you have had a fun and
rewarding experience.\n\n\n");
    Sleep(700);
    return 0;
}
```

5.7 finalround.h File Reference

This file has the code of final round of adventrous world.

```
#include <stdio.h>
#include <conio.h>
#include <ctype.h>
#include <windows.h>
#include "Congrats.h"
```

Functions

- void r4abt ()
- void options ()
- int final ()
- void winner ()

Variables

- int score = 0

5.7.1 Detailed Description

This file has the code of final round of adventrous world.

See also

final()
r4abt()
options()

5.7.2 Function Documentation

5.7.2.1 final()

```
int final ( )
```

5.7.2.2 options()

```
void options ( )
```

5.7.2.3 r4abt()

```
void r4abt ( )
```

5.7.2.4 winner()

```
void winner ( )
```

5.7.3 Variable Documentation

5.7.3.1 score

```
int score = 0
```

5.8 finalround.h

Go to the documentation of this file.

```
#include <stdio.h>
#include <conio.h>
#include <ctype.h>
#include <windows.h>
#include "Congrats.h"
void r4abt();
void options();
int score = 0;

int final()
{
    void winner();
    r4abt();

    int running = 1;
    char answer;
    printf("\n");
    printf("\n");
    while (running)
    {
        system("cls");
        printf("\n");
        printf("\n");
        printf("\n");
        printf("\n");
        printf("\n");
        printf("\n");
        printf("\n");
        printf("\t\t\t\t\t\t\tThe final Riddle Round is about to start. \n \n ");
        printf("\t\t\t\t\t\t\tso Be prepared to use your mind to its fullest potential..\n ");
        printf("\n");
        Sleep(2000);

        options();
        printf("\t\t\t\t                            Riddle no.1_ \n \n ");

        printf("\t\t\t\t No hands, no legs, yet I go everywhere. No mouth to speak yet I tell the secrets. Who am I ? ");
        scanf(" %c", &answer);
        printf("\n");

        answer = toupper(answer);
        if (answer == 'N')
        {

            printf("\n \t\t\t\t\t\tCongratulation! correct answer\n");

            score++;
        }
        else
        {
            printf("\n \t\t\t\t\t\tIncorrect. The correct answer was -N:Letter\n");
        }
        printf("\n");
        Sleep(2000);
        options();

        printf("\t\t\t\t                                        Riddle no.2 \n \n ");

        printf("\t\t\t\t  I dont need clean place, I stay in dirt. I search food for all night while I hide all day. Who am i? ? ");
        scanf(" %c", &answer);
        printf("\n");

        answer = toupper(answer);
        if (answer == 'T')
        {
            printf("\n");

            printf("\n \t\t\t\t\t\tCongratulation! correct answer\n");
            score++;
        }
        else
        {
            printf("\n \t\t\t\t\t\tIncorrect Answer!. The correct answer was-T-Mosquito \n");
        }

        printf("\n");
        Sleep(2000);
        options();

        printf("\t\t\t\t                                        Riddle no.3 \n \n ");

        printf("\t\t\t\t I can fly, I can flow. When flowing I can also freeze. Who am I ?   ");
        scanf(" %c", &answer);
        printf("\n");

        answer = toupper(answer);
        if (answer == 'P')
        {
            printf("\n");

            printf("\n \t\t\t\t\t\tCongratulation! correct answer\n");
            score++;
        }
        else
        {
            printf("\n \t\t\t\t\t\tIncorrect Answer!. The correct answer was-P:Water \n");
        }

        printf("\n");
        Sleep(2000);
        options();

        printf("\t\t\t\t                                       Riddle no.4 \n \n ");

        printf("\t\t\t\t It only does one job but has different names, its job is to dance in a world full of dirt  ");
        scanf(" %c", &answer);
        printf("\n");

        answer = toupper(answer);
        if (answer == 'I')
        {
            printf("\n");

            printf("\n \t\t\t\t\t\tCongratulation! correct answer\n");
            score++;
        }
        else
        {
            printf("\n \t\t\t\t\t\tIncorrect Answer!. The correct answer was-I-Soap \n");
        }
        printf("\n");
        Sleep(2000);
        options();

```

```
    printf("\t\t\t\t                                       Riddle no.5 \n \n ");

    printf("\t\t\t\t Wether you go inside or come out, I will just stay here  ");
    scanf(" %c", &answer);
    printf("\n");

    answer = toupper(answer);
    if (answer == 'O')
    {
        printf("\n");

        printf("\n \t\t\t\t\t\tCongratulation! correct answer\n");
        score++;
    }
    else
    {
        printf("\n \t\t\t\t\t\tIncorrect Answer!. The correct answer was-P:Door \n");
    }
    printf("\n");
    Sleep(2000);
    options();

    printf("\t\t\t\t\t                                        Riddle no.6 \n \n ");

    printf("\t\t\t\t\t am walking and my steps are rubbed away. Who am I?   ");
    scanf(" %c", &answer);
    printf("\n");

    answer = toupper(answer);
    if (answer == 'M')
    {
        printf("\n");

        printf("\n \t\t\t\t\t\tCongratulation! correct answer\n");
        score++;
    }
    else
    {
        printf("\n \t\t\t\t\t\tIncorrect Answer!. The correct answer was-M:Rowing_boat \n");
    }
    printf("\n");
    Sleep(2000);
    options();

    printf("\t\t\t\t\t                                        Riddle no.7 \n \n ");

    printf("\t\t\t\t\t one brother dances, 5 brothers watch, 4 brothers, hide. What is it?  ");
    scanf(" %c", &answer);
    printf("\n");

    answer = toupper(answer);
    if (answer == 'Z')
    {
        printf("\n");

        printf("\n \t\t\t\t\t\tCongratulation! correct answer\n");
        score++;
    }
    else
    {
        printf("\n \t\t\t\t\t\tIncorrect Answer!. The correct answer was-Z:Prepearing_Tobaco \n");
    }
    printf("\n");
    Sleep(2000);
    options();

    printf("\t\t\t\t                                        Riddle no.8 \n \n ");

    printf("\t\t\t\t\t Water or land it can stay anywhere. If it needs to go some place. It goes by hoping. What is it ?  ");
    scanf(" %c", &answer);
    printf("\n");

    answer = toupper(answer);
    if (answer == 'F')
    {
        printf("\n");

        printf("\n \t\t\t\t\t\tCongratulation! correct answer\n");
        score++;
    }
    else
    {
            printf("\n \t\t\t\t\t\tIncorrect Answer!. The correct answer was-F:frog \n");
        }
        printf("\n");
        Sleep(2000);
        options();
        printf("\t\t\t\t                                        Riddle no.9
\n \n ");

        printf("\t\t\t\t  Fits inside a plastic but doesn�t fit at the door. What is it?  ");
        scanf(" %c", &answer);
        printf("\n");

        answer = toupper(answer);
        if (answer == 'U')
        {
            printf("\n");

            printf("\n \t\t\t\t\t\tCongratulation! correct answer\n");
            score++;
        }
        else
        {
            printf("\n \t\t\t\t\t\tIncorrect Answer!. The correct answer was-U:Umbrella \n");
        }
        printf("\n");
        Sleep(2000);
        options();
        printf("\t\t\t\t                                        Riddle no.10
\n \n ");

        printf("\t\t\t\t Elephant, horses play there but there is no any country. There is a race of
king, minister, and police ");
        scanf(" %c", &answer);
        printf("\n");

        answer = toupper(answer);
        if (answer == 'W')
        {
            printf("\n");

            printf("\n \t\t\t\t\t\tCongratulation! correct answer\n");
            score++;
        }
        else
        {
            printf("\n \t\t\t\t\t\tIncorrect Answer!. The correct answer was-W:chess \n");
        }
        printf("\n");
        Sleep(2000);
        options();

        printf("\t\t\t\t\t                                        Riddle no.11
\n \n ");

        printf("\t\t\t\t it flies high up in the sky but it�s not a bird. Has a long tail but it�s not
a snake. What is it ?  ");
        scanf(" %c", &answer);
        printf("\n");

        answer = toupper(answer);
        if (answer == 'Q')
        {
            printf("\n");

            printf("\n \t\t\t\t\t\tCongratulation! correct answer\n");
            score++;
        }
        else
        {
            printf("\n \t\t\t\t\t\tIncorrect Answer!. The correct answer was-Q:Kite \n");
        }

        printf("\n");
        Sleep(2000);
        options();

        printf("\t\t\t\t\t                                        Riddle no.12
\n \n ");

        printf("\t\t\t\t It comes and goes but cannot be seen, couldn�t be caught even if I run after
it.  ");
        scanf(" %c", &answer);
        printf("\n");

        answer = toupper(answer);
        if (answer == 'L')
        {
            printf("\n");

            printf("\n \t\t\t\t\t\tCongratulation! correct answer\n");
            score++;
        }
        else
        {
            printf("\n \t\t\t\t\t\tIncorrect Answer!. The correct answer was-L:Wind \n");
        }

        printf("\n");
        Sleep(2000);
        options();
        printf("\t\t\t\t\t                                            Riddle no.13
\n \n ");

        printf("\t\t\t\t  my job is to read, write and see. Not a paper, pen or paper,Who I am?  ");
        scanf(" %c", &answer);
        printf("\n");

        answer = toupper(answer);
        if (answer == 'V')
        {
            printf("\n");

            printf("\n \t\t\t\t\t\tCongratulation! correct answer\n");
            score++;
        }
        else
        {
            printf("\n \t\t\t\t\t\tIncorrect Answer!. The correct answer was-V-Eyeglass \n");
        }

        printf("\n");
        Sleep(2000);
        options();
        printf("\t\t\t\t\t                                            Riddle no.14
\n \n ");

        printf("\t\t\t\t small in size but very powerful. Wise men say its just a dirt below the foot.
What is it ?   ");
        scanf(" %c", &answer);
        printf("\n");

        answer = toupper(answer);
        if (answer == 'A')
        {
            printf("\n");

            printf("\n \t\t\t\t\t\tCongratulation! correct answer\n");
            score++;
        }
        else
        {
            printf("\n \t\t\t\t\t\tIncorrect Answer!. The correct answer was-A:Money \n");
        }

        winner();
        return 0;
    }
}
void r4abt()
{
    system("color B");

    printf("\n");
    printf("\n");
    Sleep(800);
    printf("\t\t\t$$        $$     $$    $$  $$$$$$$  $$$$$$$$ $$$$$$  $$$$$$$   $$$$$$  $$$$$$$$ $$
$$  $$$$$$     $$$$$$$$ $$$$$$  $$$$$$$  $$$$$$$$ \n");
    printf("\t\t\t$$ $$  $$ $$      $$ $$    $$          $$    $$      $$   $$     $$    $$    $$ $$
$$  $$              $$    $$      $$          $$   \n");
    printf("\t\t\t$$   $$   $$       $$      $$$$$$$     $$    $$$$$$  $$$$$$      $$    $$    $$ $$
$$  $$$$$$ ____   $$    $$$$$$  $$$$$$$$    $$    \n");
    printf("\t\t\t$$        $$       $$           $$     $$    $$      $$   $$     $$    $$    $$ $$
$$      $$        $$    $$            $$    $$   \n");
    printf("\t\t\t$$        $$       $$     $$$$$$$$     $$    $$$$$$  $$    $$  $$$$$$  $$$$$$$$
$$$$$$$$  $$$$$$        $$    $$$$$$  $$$$$$$$    $$                              $$\n");

printf("\t\t\t____________________________________________________________________________________________________________________
    printf("\t\t\t ____________________________________________________________(The Riddle Grand
Finale)_________________________________________________________________\n");
    printf("\n");
    printf("\n");
    Sleep(1000);
    printf("\t\t\t Welcome, dear   to Mysterious Test , The Final Riddle Round !! \n  ");
    Sleep(700);
    printf("\t\t\t You have battled your way through various rounds and obstacles, proving your skills and determination. \n ");
    Sleep(700);
    printf("\t\t\t The final test is here.  \n .");
    Sleep(1000);
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\t\t\tThe Mysterious, The Final Riddle Round is the ultimate test of your riddle solving skills.   \n ");
    Sleep(700);
    printf("\t\t\tThis round is not just about problem solving, it's also about finding and thinking of answers,\n\n");
    Sleep(700);
    printf("\t\t\tYou will be presented with 14 challenging riddles, each one designed to test your intelligence, wit, and imagination. \n\n ");
    Sleep(700);
    printf("\t\t\tYou will have 26 options to choose from, each one hiding the answer to the riddle\n\n ");
    Sleep(700);
    printf("\t\t\tYour task is to find the correct answer and earn points\n  \n ");
    Sleep(500);

    printf("\n");
    printf("\n");
    Sleep(700);
    printf("\t\t\tThe point ranges for different levels of success will be kept secret, \n ");
    Sleep(700);
    printf("\t\t\tHowever, your performance will be measured by the number of points you earn and  \n ");
    Sleep(700);
    printf("\t\t\tsuccess will be awarded in three tiers: Bronze, Silver, and Gold!\n \n ");

    Sleep(700);

    printf("\n");
    printf("\n");
    printf("\n");
    printf("Press any key to begin the final Riddle round of mysterous test\n");
    getch();
    Sleep(500);
}

void options()
{
    system("cls");
    printf("\n ");
    printf("\n ");
    printf("\n ");
    printf("\n ");
printf("\t\t\t__________________________________________OPTIONS______________________________________________________\n"
    printf("\t\t\t A:money \tB:Snake \tC:Umbrella \tD:Computer \tE:Radio \tF:Frog \tG:Snow        \n \n");
    printf("\t\t\t H:Time  \tI:SOAP  \tJ:Camera \tK:Airplane \tL:Wind \tM:Rowing_boat \tN:Letter  \n \n ");
    printf("\t\t\t O:Door  \tP:Water \tQ:Kite \tR:Hide&seek \tS:walking_man \tT:Mosquito     \n \n");
    printf("\t\t\t U:Umbrella \tV:Eyeglass \tW:Chess \tX:Bats \tY:Dustbin \tZ:Preparing_tobaco \n");
printf("\t\t\t_______________________________________________________________________________________________________");
    printf("\n");
    printf("\n");
    printf("\t\t\tEnter the Alphabet(a-z or A-Z on the bais of above options to enter your answer)\n \n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n");
    Sleep(700);
}
void winner()
{
    system("color A");
    system("cls");
    printf("\n");
    Sleep(700);
    printf("\t\t\t\t\t\t\t\t\t\t  |Your total points is %d|\n  \n", score);
    printf("\n");
    printf("\n");
    if (score >= 12)
    {
        printf("\t\t\tWow, what an incredible achievement!\n");
        printf("\t\t\tYou have earned a Gold victory in the Mysterious The Final Riddle Round, the highest level of success.\n");
        printf("\t\t\tYour brilliance and perseverance have truly paid off.\n");
        printf("\t\t\tYou are a true champion and an inspiration to us all.\n ");
    }
    else if (score >= 8)
    {
        printf("\t\t\tFantastic job!\n");
        printf("\t\t\tYou have proven yourself to be a true riddle-solving master by earning a Silver victory in the Mysterious The Final Riddle Round.\n");
        printf("\t\t\tYou have shown remarkable skill and intelligence.\n");
        printf("\t\t\tKeep pushing yourself to reach new heights.\n ");
    }
    else if (score < 8)
    {
        printf("\t\t\tCongratulations!\n");
        printf("\t\t\tyou have successfully completed the Mysterious The Final Riddle Round and earned a Bronze victory.\n");
        printf("\t\t\tYour hard work and determination have paid off.\n");
        printf("\t\t\tKeep up the good work and strive for even greater achievements in the future\n ");
    }
    printf("\n ");
    printf("\n ");
    printf("\n ");
    printf("\n ");
    printf("\n ");
    Sleep(1000);
    congrats();
    printf("\t\t\tpress any key to return on the menu.");
    getch();
    menu();
    getch();
}
```

5.9 Hangman.h File Reference

This file has the code and functions for hangman game.

```
#include <stdio.h>
#include <conio.h>
#include <stdlib.h>
#include <windows.h>
#include "Singleplayer.h"
#include "Multiplayer.h"
```

Functions

- void title ()

  title of the game
- void about ()

  About the game Detail about the hangman game.
- int Hangman ()

  body

5.9.1 Detailed Description

This file has the code and functions for hangman game.

5.9.2 Function Documentation

5.9.2.1 about()

```
void about ( )
```

About the game Detail about the hangman game.

See also

about()

5.9.2.2 Hangman()

```
int Hangman ( )
```

body

Returns

returns the character that is read as an integer.

returns the character that is read as an integer.

calling single finction from Singleplayer.h. calling single function

calling single finction from Multiplayer.h

5.9.2.3 title()

```
void title ( )
```

title of the game

5.10 Hangman.h

Go to the documentation of this file.

```

#include <stdio.h>
#include <conio.h>
#include <stdlib.h>
#include <windows.h>
#include "Singleplayer.h"
#include "Multiplayer.h"

void title()
{
    printf("\t\t\t  &&       &&       &&&&&        &&&&       &&     &&&&&&&&&&&&&   &&&&       &&&&
&&&&&        &&&&&        &&\n");
    printf("\t\t\t  &&       &&      &&   &&       && &&      &&     &&              &&  &     &  &&
&&   &&       &&  &&       &&\n");
    printf("\t\t\t  &&       &&     &&     &&      &&  &&     &&     &&   &&&&&&&&   &&   &&  &&  &&
&&     &&      &&   &&      &&\n");
    printf("\t\t\t  &&&&&&&&&&     &&&&&&&&&&&     &&   &&    &&     &&   &&&&&  &   &&    &&&&   &&
&&&&&&&&&&&     &&    &&     &&\n");
    printf("\t\t\t  &&       &&   &&         &&    &&    &&   &&     &&      &&  &   &&           &&
&&         &&    &&      &&   &&\n");
```

```
    printf("\t\t\t  &&      &&  &&           &&   &&      && &&    &&      &&  &   &&           && &&           &&   &&      &&  &&\n");
    printf("\t\t\t  &&      && &&             &&  &&       &&&&    &&&&&&&&&&  &   &&           &&  && &&  &&       &&&&&\n");
}

void about()
{
    system("cls");
    printf("\n\n");
    printf("\n\n");
    printf("\n\n");

    title();

    printf("\n\n");
    printf("\n\t\t\t---------------------------------------------- ABOUT SECTION ---------------------------------------------------");
    printf("\n\n");
    Sleep(1000);
    printf("\n\n");
    printf(" \t\t     About the game:::                              \n");
    printf(" \t\t=====================================================================================================================
    printf(" \t\t|   Hangman can be played between two or more users,where one gives the word and other guesses the alphabets                         |\n");
    printf(" \t\t|   Here, the first user enters a word and after the enter key is pressed, the screen is cleared and second user starts guessing.    |\n");
    printf(" \t\t|   For every wrong guess, the number of mistakes is counted and the game is over if the second user does more than 5 mistakes       |\n");
    printf(" \t\t=====================================================================================================================
    printf("\n");
    printf("\n");
    Sleep(500);
    printf(" \t\t How to play:::\n");
    printf(" \t\t=====================================================================================================================
    printf(" \t\t|Use your keyboard and guess the word . if you press any letter and the letter is in the word the game will tell you the position of the letter. |\n\n \t\t\t BEST OF LUCK !\n");
    printf(" \t\t=====================================================================================================================
    Sleep(500);
    printf("\n");
    printf("\n");
    printf(" \t\t     Rules for the game:::                               \n");
    printf(" \t\t===========================================================\n");
    printf(" \t\t|  <1> While guessing lowercase alphabet must be used.     |\n");
    printf(" \t\t|  <2> Maximum 5 mistakes are allowed.                     |\n");
    printf(" \t\t===========================================================\n");
    printf("\n\n\n\t\t\t\t\t\t\t\t\tPress any key to continue......");
    getch();
}

int Hangman()
{
    system("cls");
    int ch;
    printf("\n\n");
    printf("\tHangman The Vocabulary Test...");

    printf("\n\n");
    printf("\n\n");

    title();
    printf("\n\n");
    printf("\n\t\t\t --------------------------------------------------- MENU ----------------------------------------------------- ");
    printf("\n\n");
    printf("\n\n");
    printf("\n\t\t\t\t\t1:PLAY \n\t\t\t\t2:ABOUT \n\t\t\t\t3:QUIT ");
    printf("\n\n");
    printf("\n\n");
    printf("\n\n");
    printf("\n\n\n\t\t\t\t\t\t\t\t\tEnter your choice,Mr player... : ");
    scanf("%d", &ch);
    fgetc(stdin);
    switch (ch)
    {
    case 1:;
        system("cls");
        int op;
    inputagain:
        printf("\n\n");
        printf("\n\n");
        printf("\n\n");

        title();
        printf("\n\n");
        printf("\n\t\t\t -------------------------------------------------- MODE
------------------------------------------------------ ");

        printf("\n\n");
        printf("\n\n");
        printf("\n\t\t\t\t1:SINGLE PLAYER\n\t\t\t\t2:MULTI PLAYER \n\t\t\t\t3:BACK ");
        printf("\n\n");
        printf("\n\n");
        printf("\n\n");
        printf("\n\n\n\t\t\t\t\t\t\t\t\tEnter your choice : ");
        scanf("%d", &op);
        fgetc(stdin);
        switch (op)
        {
        case 1:
            single();

            break;

        case 2:
            multi();

            break;

        case 3:
            Hangman();
            break;

        default:
            printf("\n\n\t\t\t\t\t     Invalid Input\t");
            Sleep(1000);
            system("cls");
            goto inputagain;
        }
        break;
    case 2:
        about();
        Hangman();
        break;

    case 3:
        system("cls");
        menu();
        break;
    default:
        printf("\n\n\t\t\t\t\t     Invalid Input\t");
        Sleep(1000);
        system("cls");
        Hangman();
    }

    return 0;
}
```

5.11 main.c File Reference

This function print the Name of the project.

```
#include <stdio.h>
#include "menu.h"
#include <windows.h>
#include "AdvWorld.h"
```

Functions

- void topspace ()

  top margin...

5.11.1 Detailed Description

This function print the Name of the project.

Author

Sujan Tamang, Binaya Karki, Bishal Karki, Devendra Khatri .

And calls menu function

5.11.2 Function Documentation

5.11.2.1 topspace()

```
void topspace ( )
```

top margin...

5.12 menu.h File Reference

This file has the menu for hangman game.

```
#include "Hangman.h"
#include "tictactoe.h"
#include "AdvWorld.h"
#include "byby.h"
#include "quiz.h"
#include <stdio.h>
#include <ctype.h>
#include <stdlib.h>
#include <conio.h>
#include <process.h>
#include <windows.h>
```

Functions

- void f_header ()

  prints Welcome
- int menu ()

5.12.1 Detailed Description

This file has the menu for hangman game.

See also

menu()

5.12.2 Function Documentation

5.12.2.1 f_header()

```
void f_header ( )
```

prints Welcome

5.12.2.2 menu()

```
int menu ( )
```

taking the user input.....

returns the character that is read as an integer.

5.13 menu.h

Go to the documentation of this file.

```
#include "Hangman.h"
#include "tictactoe.h"
#include "AdvWorld.h"
#include "byby.h"
#include "quiz.h"
#include <stdio.h>
#include <ctype.h>
#include <stdlib.h>
#include <conio.h>
#include <process.h>
#include <windows.h>

void f_header()
{
    printf("\t\t\t\t\t\t  &&      &&  &&&&&&&  &&     &&&&&&& &&&&&&&&  &&&      &&& &&&&&&&\n");
    printf("\t\t\t\t\t\t  &&      &&  &&       &&     &&      &&    &&  && &&  && && &&      \n");
    printf("\t\t\t\t\t\t  &&      &&  &&&&&&   &&     &&      &&    &&  &&   &&   && &&&&&& \n");
    printf("\t\t\t\t\t\t  &&  &&  &&  &&       &&     &&      &&    &&  &&        && &&      \n");
    printf("\t\t\t\t\t\t  &&&    &&&  &&&&&&&  &&&&&& &&&&&&& &&&&&&&&  &&        && &&&&&&&\n");
    printf("\n");
    printf("\t\t\t\t\t\t                                GAMERS");
}

int menu()
{
    int choice;
    printf("\n\t2B-SDs\n\n");
    printf("\n\n");
    f_header();
    printf("\n\n");
    printf("\n\t\t\t ------------------------------------------------------ MAIN MENU
---------------------------------------------------------- ");
    printf("\n\n");
    printf("\n\n");
    printf("\n\t\t\t\t1.Hangman");
    printf("\n\t\t\t\t2.Tic Tac Toe");
    printf("\n\t\t\t\t3.QUiz");
    printf("\n\t\t\t\t4.Adventurous World");
    printf("\n\t\t\t\t5.Exit");
    printf("\n\n\t\t\t\t\tEnter your choice : ");
    scanf("%d", &choice);
    fgetc(stdin);

    switch (choice)
    {
    case 1:
        Hangman();
        break;

    case 2:
        Tictactoe();
        break;

    case 3:
        quiz();
        break;
    case 4:
        aworld();
        break;

    case 5:
        system("cls");
        byby();
        exit(0);
        break;

    default:
        system("color 04");
        printf("\n\n\t\t\t\t\t     Invalid Input\t");
        Sleep(2000);
        system("cls");
        menu();
    }

    return 0;
}
```

5.14 Multiplayer.h File Reference

This file has the code for multipalyer of hangman game.

```
#include <stdio.h>
#include <windows.h>
```

Functions

- void load ()

  loading animation
- void takeword (char wd[50])

  hide the characters while giving input
- int multi ()

5.14.1 Detailed Description

This file has the code for multipalyer of hangman game.

See also

multi()

5.14.2 Function Documentation

5.14.2.1 load()

```
void load ( )
```

loading animation

5.14.2.2 multi()

```
int multi ( )
```

VARIABLE DECLERATION.......

Word to be guessed

contains - pattern

clears the output buffer

replacing characters with '-'

checking if user guessed is correct or not

replace the correct alphabet

player successfully guessed

player failed to guess

calling Hangman from hangman.h

See also

Hangman()

5.14.2.3 takeword()

```
void takeword (
            char wd[50] )
```

hide the characters while giving input

5.15 Multiplayer.h

Go to the documentation of this file.

```
#include <stdio.h>
#include <windows.h>
void load()
{
    printf("\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t LOADING ");
    Sleep(1000);
    printf("..");

    Sleep(500);
    printf("..");

    Sleep(500);
    printf("..");

    Sleep(500);
    printf("...");

    system("cls");
}

void takeword(char wd[50])
{
    int i;
    char ch;
    while (1)
    {
        ch = getch();
        if (ch == 13 || ch == 9)
        {
            wd[i] = '\0';
            break;
        }
        else if (ch == 8)
        {
            if (i > 0)
            {
                i--;
                printf("\b \b");
            }
        }
        else
        {
            wd[i++] = ch;
            printf("* \b");
        }
    }
}

int multi()
{
    system("cls");
    char word[20];
    char temp[20];
    char player_guessed;
    int len, n;
    int i, j;
    int lives, correct;
    int guess = 0;
    char hint[25];
    system("cls");
    load();
    printf("Hangman The Game...");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("
\t=====================================================================================================================
    printf(" \t|   WORD GIVING TIME!!!!!!! \n");
    printf(" \t|\n");
    printf(" \t|      Enter any word you want your friend to guess :");
    fflush(stdout);
    takeword(word);
    len = strlen(word);
    strlwr(word);
    printf(" \t|\n");
    printf(" \n\t|      Hint :");
    gets(hint);

    system("cls");
    load();
    printf("Hangman The Game...");
    printf("\n");
    printf("\n");
    printf("\n");
    n = len;
    printf("
=======================================================================================================================
    printf(" |\n");
    printf(" |    AND HERE WE GO......!!!\n");
    printf(" |\n");
    printf(" |    CAN YOU SAVE ME PLESASE?:( \n");
    printf(" |\n");
    printf(" |       The number of alphabets in the word : %d\n", n);
    printf("\n");
    for (i = 0; i < n; ++i)
    {
        temp[i] = '-';
        printf("\t%c", temp[i]);
    }

    printf(" |\n");
    printf(" |\t   _______________________\n"
           " |\t   |                      |\n"
           " |\t   |\n"
           " |\t   |\n"
           " |\t   |\n"
           " |\t   |\n"
           " |\t   |\n"
           " |\t   |\n"
           " |\t ----\n");
    printf(" |\n");
    lives = 5;

    while (lives <= 5)
    {
        correct = 0;
        printf(" | HINT : %s\n", hint);
        printf(" | Please enter your guess :  ");
        player_guessed = getche();
        for (j = 0; j < n; j++)
        {

            if (player_guessed == word[j])
            {
                temp[j] = word[j];
                correct = 1;
                guess++;
            }
        }

        if (correct != 1)
        {
            printf(" |\n\tYour letter %c is not in the world, Guess another letter.\n",
player_guessed);
            lives--;
            printBody(lives);
        }

        printf("\n");
        printf("\n");
        for (i = 0; i < n; i++)
        {
            printf("\t%c", temp[i]);
        }
        printf("\n");
        printf("\n");
        if (guess == n)
        {
            printf(" |\n");
            printf(" |  CONGRATULATIONS!!!!!!,You Have Guessed The Word Correctly\n");
            break;
        }
        if (lives == 0)
        {
            printf(" |\n\n");
            printf(" |  SORRY, YOU ARE HANGED:((\n");
            printf(" |  BETTER LUCK NEXT TIME!\n");
            printf(" |  The word you had to guess was :   %s", word);
            break;
        }
    }
    printf("\n\n\n\t\t\t\t\t\t\t\tPress any key to continue......");
    getch();
    Hangman();
    return 0;
}
```

5.16 quiz.h File Reference

This file has the code for quiz game.

```
#include <stdio.h>
#include <windows.h>
#include <conio.h>
```

Functions

- void quiztitle ()
- int quiz ()

5.16.1 Detailed Description

This file has the code for quiz game.

See also

quiz

5.16.2 Function Documentation

5.16.2.1 quiz()

```
int quiz ( )
```

heading

information and conditions about the game

topics selection

Basic computer quiz starts here

5.16.2.2 quiztitle()

```
void quiztitle ( )
```

5.17 quiz.h

Go to the documentation of this file.

```c
#include <stdio.h>
#include <windows.h>
#include <conio.h>

void quiztitle()
{
    printf("\t\t\t\t\t\t  QQQQQQQQQQ        UU    UU    IIIIIIII     ZZZZZZZZZZZZZ\n");
    printf("\t\t\t\t\t\t  Q        Q        UU    UU       II                   ZZ\n");
    printf("\t\t\t\t\t\t  Q        Q        UU    UU       II                 ZZ  \n");
    printf("\t\t\t\t\t\t  Q        Q        UU    UU       II               ZZ    \n");
    printf("\t\t\t\t\t\t  Q     QQQQQQQ     UU    UU       II             ZZ      \n");
    printf("\t\t\t\t\t\t  Q     QQ Q QQ     UU    UU       II           ZZ        \n");
    printf("\t\t\t\t\t\t  Q     QQ Q QQQQ   UU    UU       II        ZZ           \n");
    printf("\t\t\t\t\t\t  QQQQQQQ           UUUUUUUU    IIIIIIII     ZZZZZZZZZZZZZ\n");
}

int quiz()
{
    int i;
    int ans;
    int choice;
    int count = 0;
alpha:
    system("cls");
    printf("\n\n");
    printf("\tThe Quiz Game...");
    printf("\n\n");
    printf("\n\n");
    quiztitle();
    printf("\n\t\t\t--------------------------------------------- QUIZ MENU
---------------------------------------------------");
    Sleep(500);
    printf("\n\n");
    printf("\n\n");
    printf("\n\t\t\t  1.PLAY\n\t\t\t  2.QUIT\n");
    printf("\n\n\n\n\n\t\t\t\t\t\t\tEnter your choice, Mr.player: ");
    scanf("%d", &choice);
    fgetc(stdin);

    switch (choice)
    {
    case 1:
        system("cls");
        printf("\n\n");
        printf("\tThe Quiz Game...");
        printf("\n\n");
        printf("\n\n");
        quiztitle();
        printf("\n\t\t\t--------------------------------------------- ABOUT
---------------------------------------------------");
        printf("\n");
        printf("\n\n");
        printf(" \t\t\t\t\t  ================================================================\n");
        printf(" \t\t\t\t\t  |  <1> There are 5 topics in this quiz ,                      |\n");
        printf(" \t\t\t\t\t  |  <2> Each topic contains 10 questions ,                      |\n");
        printf(" \t\t\t\t\t  |  <3> Each question contains 10 points,                       |\n");
        printf(" \t\t\t\t\t  |  <4> Alphabet input are consider as wrong answer             |\n");
        printf(" \t\t\t\t\t  ================================================================");
        printf("\n\n");
        printf("\n\n");
        printf("\n\n\n\t\t\t\t\t\t\tPress any key to continue......");
        getch();
        goto start;
        break;

    case 2:
        system("cls");
        menu();
        break;

    default:
        printf("\n\n");
        printf("\n\n");
        printf("\n\n\t\t\t\t\t\t\t\t     Invalid Input\t");
        Sleep(1000);
        goto alpha;
    }

start:
    system("cls");
    printf("\n\n");
    printf("\tThe Quiz Game...");
    printf("\n\n");
    printf("\n\n");
    quiztitle();
    printf("\n\t\t\t--------------------------------------------- TOPIC SECTION ---------------------------------------------------");
    printf("\n\n");
    printf("\t\t\t\t1) Basic computer \n\t\t\t\t2) Computer system \n\t\t\t\t3) Networking \n\t\t\t\t4) C-programming \n\t\t\t\t5) JavaScript \n\t\t\t\t6)Back");
    printf("\n\n\n\t\t\t\t\t\t\t\t\tEnter your choice : ");
    scanf("%d", &choice);

    switch (choice)
    {
    case 1:
        system("cls");
        printf("\n\n");
        printf("\tAnd Here We go...");
        printf("\n\n");
        printf("\n\n");
        printf("\n\t\t\t--------------------------------------------- Game Started ---------------------------------------------------");
        printf("\n\t\t\t\t________________________Q.no-1_______________________________\n");
        printf("\t\t\t\tWhich one is the first search engine in internet?\n\n");
        printf("\t\t\t\t 1) Google \n\t\t\t\t 2) Archie\n\t\t\t\t 3) Wais\n\t\t\t\t 4)  Altavista\n");
        printf("\t\t\t\tEnter your answer:");
    one:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 2:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto one;
            break;
        }

        printf("\t\t\t\t________________________Q.no-2_______________________________\n");
        printf("\t\t\t\t Where are the contents of your computer's hard drive indexed?\n\n");
        printf("\t\t\t\t 1) Yahoo! \n\t\t\t\t 2) Google\n\t\t\t\t 3) MSN \n\t\t\t\t 4) None of the above\n");
        printf("\t\t\t\tEnter your answer : ");
    two:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto two;
            break;
        }

        printf("\t\t\t\t________________________Q.no-3_______________________________\n");
        printf("\t\t\t\t Main circuit board in a computer is:\n\n");
        printf("\t\t\t\t 1) Decoder \n\t\t\t\t 2) Highlight\n\t\t\t\t 3) Select \n\t\t\t\t 4) Mother board\n");
        printf("\t\t\t\tEnter your answer : ");
    three:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto three;
            break;
        }

        printf("\t\t\t\t________________________Q.no-4_______________________________\n");
        printf("\t\t\t\t ISP stands for:\n\n");
        printf("\t\t\t\t 1) Internet Survey Period \n\t\t\t\t 2) Integrated Service Provider\n\t\t\t\t 3) Internet Security Protocol \n\t\t\t\t 4) Internet Service Provider\n");
        printf("\t\t\t\tEnter your answer : ");
    four:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto four;
            break;
        }

        printf("\t\t\t\t________________________Q.no-5_______________________________\n");
        printf("\t\t\t\t Internet Explorer is a:\n\n");
        printf("\t\t\t\t 1) Any person browsing the net \n\t\t\t\t 2) Web Browser\n\t\t\t\t 3) Graphing Package \n\t\t\t\t 4) News Reader\n");
        printf("\t\t\t\tEnter your answer : ");
    five:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
```

```
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 2:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto five;
            break;
        }

        printf("\t\t\t\t________________________Q.no-6_______________________________\n");
        printf("\t\t\t\t Lately you hear a clatter from your computer, especially when you load a program or call up information. What’s going on? \n\n");
        printf("\t\t\t\t 1) It’s infested with reindeer \n\t\t\t\t 2) Your hard disk may be headed for failure\n\t\t\t\t 3) A loose wire is hitting the cooling fanct \n\t\t\t\t 4) A loud metallic clatter is normal\n");
        printf("\t\t\t\tEnter your answer : ");
    six:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 2:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto six;
            break;
        }

        printf("\t\t\t\t________________________Q.no-7_______________________________\n");
        printf("\t\t\t\t The ’http’ you type at the beginning of any site’s address stands for:\n\n");
        printf("\t\t\t\t 1) HTML Transfer Technology Process\n\t\t\t\t 2)  Hyperspace Terms and Tech Protocol\n\t\t\t\t 3)  Hyperspace Techniques & Tech Progress\n\t\t\t\t 4) Hyper Text Transfer Protocol\n");
        printf("\t\t\t\tEnter your answer : ");
    seven:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto seven;
            break;
        }

        printf("\t\t\t\t________________________Q.no-8_______________________________\n");
        printf("\t\t\t\tWhich company created the most used networking software in the 1980's\n\n");
        printf("\t\t\t\t\t 1) Microsoft \n\t\t\t\t\t 2) Sun\n\t\t\t\t\t 3) IBM \n\t\t\t\t\t 4) Novell\n");
        printf("\t\t\t\tEnter your answer : ");
    eight:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 2:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto eight;
            break;
        }

        printf("\t\t\t\t________________________Q.no-9_______________________________\n");
        printf("\t\t\t\tWhich of the following operating systems is produced by IBM?\n\n");
        printf("\t\t\t\t\t 1) OS-2 \n\t\t\t\t\t 2) Windows\n\t\t\t\t\t 3) DOS \n\t\t\t\t\t 4) UNIX\n");
        printf("\t\t\t\tEnter your answer : ");
    nine:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto nine;
            break;
        }

        printf("\t\t\t\t________________________Q.no-10_______________________________\n");
        printf("\t\t\t\tWhich is the best search tool for finding We sites that have been handpicked and recommended by someone else?\n\n");
        printf("\t\t\t\t 1) Subject directories \n\t\t\t\t 2) Search engines\n\t\t\t\t 3) Meta-search engines \n\t\t\t\t 4) Discussion groups\n");
        printf("\t\t\t\tEnter your answer : ");
    ten:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto ten;
            break;
        }

        printf("\n\n\t\t\t\tEach question holds the value of 10 points\n");
        printf("\t\t\t\tYour score is %d", 10 * count);
        printf("\n\n\n\t\t\t\t\t\t\t\tPress any key to continue......");
        getch();
        goto start;

    case 2:
        system("cls");
        printf("\tAnd Here We go...");
        printf("\n\n");
        printf("\n\n");
        printf("\n\t\t\t--------------------------------------------- Game Started ---------------------------------------------------");

        printf("\n\t\t\t\t________________________Q.no-1_______________________________\n");
        printf("\t\t\t\tWhich of the following statements correctly describes the microcomputer disk drive?\n\n");
        printf("\t\t\t\t 1)  A disk drive is used to transfer data to and from disks.\n\t\t\t\t 2) The two types of disk drives are hard disks and flexible disks.\n\t\t\t\t 3) Hard disks are permanent storage devices.\n\t\t\t\t 4) All of these\n");
        printf("\t\t\t\tEnter your answer : ");
    eleven:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto eleven;
            break;
        }

        printf("\t\t\t\t________________________Q.no-2_______________________________\n");
        printf("\t\t\t\tRAM chips\n\n");
        printf("\t\t\t\t 1)  Store data indefinitely unless you delete it.\n\t\t\t\t 2)  Allow the computer to store data electronically\n\t\t\t\t 3)  Are always measured in thousand of bytes\n\t\t\t\t 4)  All of these\n");
        printf("\t\t\t\tEnter your answer : ");
    twelve:
        scanf("%d", &ans);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 2:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto twelve;
            break;
        }

        printf("\t\t\t\t________________________Q.no-3_______________________________\n");
        printf("\t\t\t\t The CPU and memory are located on the\n\n");
        printf("\t\t\t\t 1) Keyboard \n\t\t\t\t 2) Graphics board\n\t\t\t\t 3) Sound board \n\t\t\t\t 4) Motherboard\n");
        printf("\t\t\t\tEnter your answer : ");
    thirteen:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto thirteen;
            break;
        }

        printf("\t\t\t\t________________________Q.no-4_______________________________\n");
        printf("\t\t\t\t The brain of any computer system is\n\n");
        printf("\t\t\t\t 1) CPU \n\t\t\t\t 2) Memory\n\t\t\t\t 3) ALU \n\t\t\t\t 4) Control unit\n");
        printf("\t\t\t\tEnter your answer : ");
    fourteen:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto fourteen;
            break;
        }

        printf("\t\t\t\t________________________Q.no-5_______________________________\n");
        printf("\t\t\t\t ALU stands for\n\n");
        printf("\t\t\t\t 1)  Algorithm and logical unit \n\t\t\t\t 2)  Arithmetic and logical unit\n\t\t\t\t 3) Arithmetic and logarithm unit\n\t\t\t\t 4) Algorithm and logarithm unit\n");
        printf("\t\t\t\tEnter your answer : ");
    fifteen:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 2:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto fifteen;
            break;
        }

        printf("\t\t\t\t________________________Q.no-6_______________________________\n");
        printf("\t\t\t\t Which of the following is the main circuit-board of the system unit? \n\n");
        printf("\t\t\t\t 1) Control unit \n\t\t\t\t 2) Sound board\n\t\t\t\t 3) Motherboard \n\t\t\t\t 4) Graphics board\n");
        printf("\t\t\t\tEnter your answer : ");
    sixteen:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        case 3:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto sixteen;
            break;
        }

        printf("\t\t\t\t________________________Q.no-7_______________________________\n");
        printf("\t\t\t\t The ’http’ you type at the beginning of any site’s address stands for:\n\n");
        printf("\t\t\t\t 1) HTML Transfer Technology Process\n\t\t\t\t 2)  Hyperspace Terms and Tech Protocol\n\t\t\t\t 3)  Hyperspace Techniques & Tech Progress\n\t\t\t\t 4) Hyper Text Transfer Protocol\n");
        printf("\t\t\t\tEnter your answer : ");
    seventeen:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto seventeen;
            break;
        }

        printf("\t\t\t\t________________________Q.no-8_______________________________\n");
        printf("\t\t\t\tPCS are considered fourth-generation and contain\n\n");
        printf("\t\t\t\t 1) Microprocessors \n\t\t\t\t 2) Information\n\t\t\t\t 3) Vacuum tubes \n\t\t\t\t 4) Data\n");
        printf("\t\t\t\tEnter your answer : ");
    eighteen:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto eighteen;
            break;
        }

        printf("\t\t\t\t________________________Q.no-9_______________________________\n");
        printf("\t\t\t\tThe hardware in which data may be stored for a computer system is called\n\n");
        printf("\t\t\t\t 1) Memory \n\t\t\t\t 2) Control unit\n\t\t\t\t 3) Bus \n\t\t\t\t 4) Register\n");
        printf("\t\t\t\tEnter your answer : ");
    nineteen:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto nineteen;
            break;
        }

        printf("\t\t\t\t________________________Q.no-10_______________________________\n");
        printf("\t\t\t\tWhich bus is used to connect the monitor to the CPU?\n\n");
        printf("\t\t\t\t 1) SCSI bus \n\t\t\t\t 2) HACK bus\n\t\t\t\t 3) KISS bus\n\t\t\t\t 4) PCI\n");
        printf("\t\t\t\tEnter your answer : ");
    twenty:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto twenty;
            break;
        }

        printf("\t\t\t\tEach question holds the value of 10 points\n");
        printf("\t\t\t\tYour score is %d", 10 * count);
        printf("\n\n\n\t\t\t\t\t\t\t\tPress any key to continue......");
        getch();
        goto start;

    case 3:
        system("cls");
        printf("\tAnd Here We go...");
        printf("\n\n");
        printf("\n\n");
        printf("\n\t\t\t--------------------------------------------- Game Started ---------------------------------------------------");

        printf("\n\t\t\t\t________________________Q.no-1_______________________________\n");
        printf("\t\t\t\tWhat is the frequency range of the IEEE 802.11a standard?\n\n");
        printf("\t\t\t\t 1) 2.4Gbps \n\t\t\t\t 2) 5Gbps\n\t\t\t\t 3) 2.4GHz\n\t\t\t\t 4) 5GHz\n");
        printf("\t\t\t\tEnter your answer : ");
    twenty_one:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto twenty_one;
            break;
        }

        printf("\t\t\t\t________________________Q.no-2_______________________________\n");
        printf("\t\t\t\t What is the maximum distance running the lowest data rate for 802.11b?\n\n");
        printf("\t\t\t\t 1) About 100 feet \n\t\t\t\t 2) About 175 feet\n\t\t\t\t 3) About 300 feet \n\t\t\t\t 4) About 350 feet\n");
        printf("\t\t\t\tEnter your answer : ");
    twenty_two:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto twenty_two;
            break;
        }

        printf("\t\t\t\t________________________Q.no-3_______________________________\n");
        printf("\t\t\t\t What is the maximum distance with maximum data rate for 802.11a?\n\n");
        printf("\t\t\t\t 1) About 65-75 feet \n\t\t\t\t 2) About 90-100 feet\n\t\t\t\t 3) About 150 feet \n\t\t\t\t 4) Over 200 feet\n");
        printf("\t\t\t\tEnter your answer : ");
    twenty_three:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto twenty_three;
            break;
        }

        printf("\t\t\t\t________________________Q.no-4_______________________________\n");
        printf("\t\t\t\t What is the frequency range of the IEEE 802.11b standard?\n\n");
        printf("\t\t\t\t 1) 2.4Gbps \n\t\t\t\t 2) 5Gbps\n\t\t\t\t 3) 2.4GHz \n\t\t\t\t 4) 5GHz\n");
        printf("\t\t\t\tEnter your answer : ");
    twenty_four:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        case 3:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto twenty_four;
            break;
        }

        printf("\t\t\t\t________________________Q.no-5_______________________________\n");
        printf("\t\t\t\t You have a Cisco mesh network. What protocol allows multiple APs to connect with many redundant connections between nodes?\n\n");
        printf("\t\t\t\t 1) LWAPP \n\t\t\t\t 2) AWPP\n\t\t\t\t 3) STP \n\t\t\t\t 4) IEEE\n");
        printf("\t\t\t\tEnter your answer : ");
    twenty_five:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 2:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto twenty_five;
            break;
        }

        printf("\t\t\t\t________________________Q.no-6_______________________________\n");
        printf("\t\t\t\t Which layer 1 devices can be used to enlarge the area covered by a single LAN segment? \n\n");
        printf("\t\t\t\t 1) Switch\n\t\t\t\t 2) NIC\n\t\t\t\t 3) Hub and repeater\n\t\t\t\t 4) Repeater\n");
        printf("\t\t\t\tEnter your answer : ");
    twenty_six:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        case 3:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto twenty_six;
            break;
        }

        printf("\t\t\t\t________________________Q.no-7_______________________________\n");
        printf("\t\t\t\t Routers operate at layer _____. LAN switches operate at layer _____. Ethernet hubs operate at layer _____. Word processing operates at layer _____.\n\n");
        printf("\t\t\t\t 1) 3, 3, 1, 7\n\t\t\t\t 2) 3, 2, 1, none\n\t\t\t\t 3) 3, 2, 1, 7\n\t\t\t\t 4) 3, 3, 2, none\n");
        printf("\t\t\t\tEnter your answer : ");
    twenty_seven:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 2:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto twenty_seven;
            break;
        }

        printf("\t\t\t\t________________________Q.no-8_______________________________\n");
        printf("\t\t\t\tWhich of the following describe router functions?\n\n");
        printf("\t\t\t\t 1) Packet switching \n\t\t\t\t 2) Packet filtering\n\t\t\t\t 3) Internetwork communication \n\t\t\t\t 4) Path selection\n 5) All of the above \n");
        printf("\t\t\t\tEnter your answer : ");
    twenty_eight:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 5\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 5\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 5\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 5\n");
            break;

        case 5:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto twenty_eight;
            break;
        }

        printf("\t\t\t\t________________________Q.no-9_______________________________\n");
        printf("\t\t\t\tWhy does the data communication industry use the layered OSI reference model?\n\n");
        printf("\t\t\t\t A) It divides the network communication process into smaller and simpler components, thus aiding component development, design, and troubleshooting. \n B) It enables equipment from different vendors to use the same electronic components, thus saving research and development funds.\n C) It supports the evolution of multiple competing standards and thus provides business opportunities for equipment manufacturers. \n D) It encourages industry standardization by defining what functions occur at each layer of the model.\n");
        printf("\t\t\t\t 1) A only \n\t\t\t\t 2) A and D\n\t\t\t\t 3) B and C \n\t\t\t\t 4) C only\n");
        printf("\t\t\t\tEnter your answer : ");
    twenty_nine:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 2:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto twenty_nine;
            break;
        }

        printf("\t\t\t\t________________________Q.no-10_______________________________\n");
        printf("\t\t\t\tA receiving host has failed to receive all of the segments that it should acknowledge. What can the host do to improve the reliability of this communication session?\n\n");
        printf("\t\t\t\t 1) Send a different source port number. \n\t\t\t\t 2) Restart the virtual circuit.\n\t\t\t\t 3) Decrease the sequence number. \n\t\t\t\t 4) Decrease the window size.\n");
        printf("\t\t\t\tEnter your answer : ");
    thirty:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto thirty;
            break;
        }

        printf("\t\t\t\tEach question holds the value of 10 points\n");
        printf("\t\t\t\tYour score is %d", 10 * count);
        printf("\n\n\n\t\t\t\t\t\t\t\tPress any key to continue......");
        getch();
        goto start;

    case 4:
        system("cls");
        printf("\tAnd Here We go...");
        printf("\n\n");
        printf("\n\n");
        printf("\n\t\t\t--------------------------------------------- Game Started
---------------------------------------------------");

        printf("\n\t\t\t\t________________________Q.no-1_______________________________\n");
        printf("\t\t\t\tIdentify the incorrect file opening mode from the following. \n\n");
        printf("\t\t\t\t 1) r \n\t\t\t\t 2) w \n\t\t\t\t 3) x\n\t\t\t\t 4)  a\n");
        printf("\t\t\t\tEnter your answer : ");
    thirty_one:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        case 3:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto thirty_one;
            break;
        }

        printf("\t\t\t\t________________________Q.no-2_______________________________\n");
        printf("\t\t\t\tWhich of the following operator can be used to access value at address stored
in a pointer variable?\n\n");
        printf("\t\t\t\t 1) * \n\t\t\t\t 2) #\n\t\t\t\t 3) && \n\t\t\t\t 4) @ \n");
        printf("\t\t\t\tEnter your answer : ");
    thirty_two:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 2:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto thirty_two;
            break;
        }

        printf("\t\t\t\t________________________Q.no-3_______________________________\n");
        printf("\t\t\t\t An operation with only one operand is called unary operation.\n\n");
        printf("\t\t\t\t 1) Yes \n\t\t\t\t 2) An operation with two operand is called unary operation\n\t\t\t\t 3)  An operation with unlimited operand is called unary operation \n\t\t\t\t 4) None of the above\n");
        printf("\t\t\t\tEnter your answer : ");
    thirty_three:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto thirty_three;
            break;
        }

        printf("\t\t\t\t________________________Q.no-4_______________________________\n");
        printf("\t\t\t\t The maximum combined length of the command-line arguments as well as the spaces between adjacent arguments is � a) 120 characters, b) 56 characters, c) Vary from one OS to another\n\n");
        printf("\t\t\t\t 1) a\n\t\t\t\t 2) a,b\n\t\t\t\t 3) a,b,c \n\t\t\t\t 4) c\n");
        printf("\t\t\t\tEnter your answer : ");
    thirty_four:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto thirty_four;
            break;
        }

        printf("\t\t\t\t________________________Q.no-5_______________________________\n");
        printf("\t\t\t\t C is a:\n\n");
        printf("\t\t\t\t 1) general-purpose computer programming language \n\t\t\t\t 2) procedural computer programming language\n\t\t\t\t 3) multi-paradigm computer programming language \n\t\t\t\t 4) All the above\n");
        printf("\t\t\t\tEnter your answer : ");
    thirty_five:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto thirty_five;
            break;
        }

        printf("\t\t\t\t________________________Q.no-6_______________________________\n");
        printf("\t\t\t\t C first appeared in \n\n");
        printf("\t\t\t\t 1)  1972 \n\t\t\t\t 2)  1974\n\t\t\t\t 3) 1982 \n\t\t\t\t 4) 1984\n");
        printf("\t\t\t\tEnter your answer : ");
    thirty_six:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto thirty_six;
            break;
        }

        printf("\t\t\t\t________________________Q.no-7_______________________________\n");
        printf("\t\t\t\t  Filename extension of C language is\n\n");
        printf("\t\t\t\t 1) .cp\n\t\t\t\t 2) cl\n\t\t\t\t 3)   .c\n\t\t\t\t 4)  All the above\n");
        printf("\t\t\t\tEnter your answer : ");
    thirty_seven:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        case 3:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto thirty_seven;
            break;
        }

        printf("\t\t\t\t________________________Q.no-8_______________________________\n");
        printf("\t\t\t\t C influenced by\n\n");
        printf("\t\t\t\t 1) Assembly language \n\t\t\t\t 2) FORTRAN\n\t\t\t\t 3)  ALGOL 68 \n\t\t\t\t 4) All the above\n");
        printf("\t\t\t\tEnter your answer : ");
    thirty_eight:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto thirty_eight;
            break;
        }

        printf("\t\t\t\t________________________Q.no-9_______________________________\n");
        printf("\t\t\t\t C influenced\n\n");
        printf("\t\t\t\t 1)  C++, C#, and Objective-C \n\t\t\t\t 2) Java and JavaScript\n\t\t\t\t 3) Perl, PHP, and Python \n\t\t\t\t 4) All the above\n");
        printf("\t\t\t\tEnter your answer : ");
    thirty_nine:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto thirty_nine;
            break;
        }

        printf("\t\t\t\t_______________________Q.no-10______________________________\n");
        printf("\t\t\t\tWho is father of C Language ?\n\n");
        printf("\t\t\t\t 1)Bjarne Stroustrup \n\t\t\t\t 2)  Dennis Ritchie\n\t\t\t\t 3) Dr. E.F. Codd\n\t\t\t\t 4)  James A. Gosling\n");
        printf("\t\t\t\tEnter your answer : ");
    fourty:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 2:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto fourty;
            break;
        }

        printf("\t\t\t\tEach question holds the value of 10 points\n");
        printf("\t\t\t\tYour score is %d", 10 * count);
        printf("\n\n\n\t\t\t\t\t\t\t\tPress any key to continue......");
        getch();
        goto start;

    case 5:
        system("cls");
        printf("\tAnd Here We go...");
        printf("\n\n");
        printf("\n\n");
        printf("\n\t\t\t-------------------------------------------- Game Started --------------------------------------------------");

        printf("\n\t\t\t\t_______________________Q.no-1______________________________\n");
        printf("\t\t\t\tWhich of the following is correct about features of JavaScript?\n\n");
        printf("\t\t\t\t 1) JavaScript is a lightweight, interpreted programming language\n\t\t\t\t 2) JavaScript is designed for creating network-centric applications.\n\t\t\t\t 3) JavaScript is complementary to and integrated with Java.\n\t\t\t\t 4) All of the above.\n");
        printf("\t\t\t\tEnter your answer : ");
    fourty_one:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto fourty_one;
            break;
        }

        printf("\t\t\t\t________________________Q.no-2_______________________________\n");
        printf("\t\t\t\tHow can you get the total number of arguments passed to a function?\n\n");
        printf("\t\t\t\t 1) Using args.length property\n\t\t\t\t 2) Using arguments.length property\n\t\t\t\t 3) Both of the above.\n\t\t\t\t 4)  None of the above.\n");
        printf("\t\t\t\tEnter your answer : ");
    fourty_two:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 2:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto fourty_two;
            break;
        }

        printf("\t\t\t\t________________________Q.no-3_______________________________\n");
        printf("\t\t\t\t Which built-in method removes the last element from an array and returns that element?\n\n");
        printf("\t\t\t\t 1) last() \n\t\t\t\t 2) get()\n\t\t\t\t 3) pop()\n\t\t\t\t 4) None of the above.\n");
        printf("\t\t\t\tEnter your answer :");
    fourty_three:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        case 3:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto fourty_three;
            break;
        }

        printf("\t\t\t\t________________________Q.no-4_______________________________\n");
        printf("\t\t\t\t Which built-in method returns the string representation of the number's value?\n\n");
        printf("\t\t\t\t 1) toValue() \n\t\t\t\t 2)  toNumber()\n\t\t\t\t 3) toString() \n\t\t\t\t 4) None of the above.\n");
        printf("\t\t\t\tEnter your answer : ");
    fourty_four:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        case 3:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 3\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto fourty_four;
            break;
        }

        printf("\t\t\t\t________________________Q.no-5_______________________________\n");
        printf("\t\t\t\t Which of the following function of Number object defines how many total digits to display of a number?\n\n");
        printf("\t\t\t\t 1) toExponential()\n\t\t\t\t 2)  toFixed()\n\t\t\t\t 3) toLocaleString()\n\t\t\t\t 4) toPrecision()\n");
        printf("\t\t\t\tEnter your answer : ");
    fourty_five:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto fourty_five;
            break;
        }

        printf("\t\t\t\t________________________Q.no-6_______________________________\n");
        printf("\t\t\t\t Which of the following function of String object returns the index within the calling\n");
        printf("\t\t\t\t String object of the first occurrence of the specified value? \n\n");
        printf("\t\t\t\t 1) substr() \n\t\t\t\t 2) search()\n\t\t\t\t 3)  lastIndexOf() \n\t\t\t\t 4) indexOf()\n");
        printf("\t\t\t\tEnter your answer : ");
    fourty_six:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto fourty_six;
            break;
        }

        printf("\t\t\t\t________________________Q.no-7_______________________________\n");
        printf("\t\t\t\t Which of the following function of String object creates an HTML anchor that is used as a hypertext target?\n\n");
        printf("\t\t\t\t 1) anchor()\n\t\t\t\t 2) link()\n\t\t\t\t 3) blink()\n\t\t\t\t 4) big()\n");
        printf("\t\t\t\tEnter your answer : ");
    fourty_seven:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto fourty_seven;
            break;
        }

        printf("\t\t\t\t________________________Q.no-8_______________________________\n");
        printf("\t\t\t\tWhich of the following function of String object causes a string to be italic, as if it were in an <i> tag?\n\n");
        printf("\t\t\t\t 1) fixed()\n\t\t\t\t 2) fontcolor()\n\t\t\t\t 3) fontsize()\n\t\t\t\t 4) italics()\n");
        printf("\t\t\t\tEnter your answer : ");
    fourty_eight:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 4\n");
            break;

        case 4:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto fourty_eight;
            break;
        }

        printf("\t\t\t\t________________________Q.no-9_______________________________\n");
        printf("\t\t\t\tWhich of the following function of Array object joins all elements of an array into a string?\n\n");
        printf("\t\t\t\t 1) concat() \n\t\t\t\t 2)  join()\n\t\t\t\t 3)  pop() \n\t\t\t\t 4) map()\n");
        printf("\t\t\t\tEnter your answer : ");
    fourty_nine:
        scanf("%d", &ans);
        fgetc(stdin);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 2:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 2\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto fourty_nine;
            break;
        }

        printf("\t\t\t\t________________________Q.no-10_______________________________\n");
        printf("\t\t\t\t Which of the following function of Array object represents the source code of an object?\n\n");
        printf("\t\t\t\t 1) toSource() \n\t\t\t\t 2) splice()\n\t\t\t\t 3)  toString()\n\t\t\t\t 4) unshift()\n");
        printf("\t\t\t\tEnter your answer : ");
    fifty:
        scanf("%d", &ans);
        switch (ans)
        {
        case 1:
            printf("\n\t\t\t\tCorrect answer\n");
            count++;
            break;

        case 2:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        case 3:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        case 4:
            printf("\n\t\t\t\tWrong answer\n");
            printf("\t\t\t\tCorrect answer option is 1\n");
            break;

        default:
            printf("\t\t\t\tInvalid Input please reenter your answer");
            goto fifty;
            break;
        }

        printf("\t\t\t\tEach question holds the value of 10 points\n");
        printf("\t\t\t\tYour score is %d", 10 * count);
        printf("\n\n\n\t\t\t\t\t\t\t\t\tPress any key to continue......");
        getch();
        goto start;

    case 6:
        goto alpha;
    }
    return 0;
}
```

5.18 Singleplayer.h File Reference

This file has the code of singleplayer for hangman game.

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <windows.h>
```

Functions

- void loading ()

  loading Animation
- void printBody (int mistakes)

  mistake calculator
- char ∗ personality ()
- char ∗ personalityHint (char[ ])
- char ∗ MedicalName ()
- char ∗ MedicalNameHint (char[ ])
- int single ()

5.18.1 Detailed Description

This file has the code of singleplayer for hangman game.

See also

single()

5.18.2 Function Documentation

5.18.2.1 loading()

```
void loading ( )
```

loading Animation

5.18.2.2 MedicalName()

```
char * MedicalName ( )
```

5.18.2.3 MedicalNameHint()

```
char * MedicalNameHint (
             char word[] )
```

5.18.2.4 personality()

```
char * personality ( )
```

Returns

function that return string

5.18.2.5 personalityHint()

```
char * personalityHint (
             char word[] )
```

5.18.2.6 printBody()

```
void printBody (
             int mistakes )
```

mistake calculator

5.18.2.7 single()

```
int single ( )
```

header

replacing characters with '-'

checking if user guessed is correct or not

replace the correct alphabet

player successfully guessed

player failed to guess

calling Hangman from hangman.h

5.19 Singleplayer.h

Go to the documentation of this file.

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <windows.h>

void loading()
{
    printf("\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t LOADING ");
    Sleep(1000);
    printf("..");

    Sleep(500);
    printf("..");

    Sleep(500);
    printf("..");

    Sleep(500);
    printf("...");

    system("cls");
}

void printBody(int mistakes)
{
    switch (mistakes)
    {
    case 4:
        printf(" \t|\n");
        printf(" \t|\t   _______________________\n"
               " \t|\t   |                      |\n"
               " \t|\t   |                     ( )\n"
               " \t|\t   |\n"
               " \t|\t   |\n"
               " \t|\t   |\n"
               " \t|\t   |\n"
               " \t|\t   |\n"
               " \t|\t ----\n");
        printf(" \t|\n");
        break;

    case 3:

        printf(" \t|\n");
        printf(" \t|\t   _______________________\n"
               " \t|\t   |                      |\n"
               " \t|\t   |                     ( )\n"
               " \t|\t   |                      |\n"
               " \t|\t   |\n"
               " \t|\t   |\n"
               " \t|\t   |\n"
               " \t|\t   |\n"
               " \t|\t ----\n");
        printf(" \t|\n");
        break;

    case 2:

        printf(" \t|\n");
        printf(" \t|\t   _______________________\n"
               " \t|\t   |                      |\n"
               " \t|\t   |                     ( )\n"
               " \t|\t   |                     /|\\ \n"
               " \t|\t   |\n"
               " \t|\t   |\n"
               " \t|\t   |\n"
               " \t|\t ----\n");
        printf(" \t|\n");
        break;

    case 1:

        printf(" \t|\n");
        printf(" \t|\t   _______________________\n"
               " \t|\t   |                      |\n"
               " \t|\t   |                     ( )\n"
               " \t|\t   |                     /|\\ \n"
               " \t|\t   |                      |   \n"
               " \t|\t   |\n"
               " \t|\t   |\n"
               " \t|\t ----\n");
        printf(" \t|\n");
        break;

    case 0:
        printf(" \t|\n");
        printf(" \t|\t   ______________________\n"
               " \t|\t   |                     |\n"
               " \t|\t   |                    ( )\n"
               " \t|\t   |                    /|\\ \n"
               " \t|\t   |                     |   \n"
               " \t|\t   |                    / \\\n"
               " \t|\t   |\n"
               " \t|\t ----\n");
        printf(" \t|\n");
        break;
    }
}

char *personality();
char *personalityHint(char[]);
char *MedicalName();
char *MedicalNameHint(char[]);

int single()
{
    system("cls");

    char player_guessed;
    int lives, correct;
    int len, n, i, temp[20], j;
    int guess = 0;
    char *word;
    char *hint;
    system("cls");
    int ch;
    printf("\n\n");
    printf("\n\n");
    printf("\n\n");
    printf("\t\t\t  &&      &&       &&&&&        &&&&       &&    &&&&&&&&&&&&&   &&&&       &&&&
&&&&&        &&&&&       &&\n");
    printf("\t\t\t  &&      &&      &&    &&        && &&      &&    &&               &&   &     &   &&
&&   &&        &&   &&      &&\n");
    printf("\t\t\t  &&      &&     &&      &&       &&   &&      &&    &&    &&&&&&&&   &&    &&   &&   &&
&&     &&       &&    &&      &&\n");
    printf("\t\t\t  &&&&&&&&&&    &&&&&&&&&&&     &&    &&     &&    &&    &&&&&  &   &&    &&&&   &&
&&&&&&&&&&&     &&     &&     &&\n");
    printf("\t\t\t  &&      &&   &&          &&     &&    &&   &&    &&      &&  &   &&           &&
&&          &&     &&      &&    &&\n");
    printf("\t\t\t  &&      &&  &&            &&    &&      && &&    &&      &&  &   &&           &&
&&           &&    &&       &&   &&\n");
    printf("\t\t\t  &&      && &&              &&   &&       &&&&    &&&&&&&&&&  &   &&           &&  &&
&&  &&       &&&&&\n");

    printf("\n\n");
    printf("\n\t\t\t -------------------------------------------------- CATAGORIES
----------------------------------------------------- ");
    printf("\n\n");
    printf("\n\t\t\t\t1:PERSONALITY \n\t\t\t\t2:Medical NAME OF DOCTOR \n\t\t\t\t3:BACK ");
    printf("\n\n");
    printf("\n\n");
    printf("\n\n");
    printf("\n\n\n\t\t\t\t\t\t\t\t\tEnter your choice,Mr palayer... : ");
    scanf("%d", &ch);
    switch (ch)
    {
    case 1:
        word = personality();
        len = strlen(word);
        n = len;
        hint = personalityHint(word);
        break;

    case 2:
        word = MedicalName();
        len = strlen(word);
        n = len;
        hint = MedicalNameHint(word);
        break;

    case 3:
        Hangman();

    default:
        printf("\n\n\t\t\t\t\t     Invalid Input\t");
        Sleep(1000);
        system("cls");
        single();
    }
    system("cls");
    loading();
    printf("Hangman The Vocabulary Test...");
    printf("\n");
    printf("\n");
    printf("\n");
    printf("
\t======================================================================================================================
    printf(" \t|\n");
    printf(" \t|    CAN YOU SAVE ME PLESASE ? \n");
    printf(" \t|\n");
    printf(" \t|       The number of alphabets in the word : %d\n", n);
    printf(" \t|\n");
    for (i = 0; i < n; ++i)
    {
        temp[i] = '-';
        printf("\t    %c", temp[i]);
    }
    printf(" \t|\n");
    printf(" \t|\t   _______________________\n"
           " \t|\t   |                      |\n"
           " \t|\t   |\n"
           " \t|\t   |\n"
           " \t|\t   |\n"
           " \t|\t   |\n"
           " \t|\t   |\n"
           " \t|\t   |\n"
           " \t|\t ----\n");
    printf(" \t|\n");
    lives = 5;
    while (lives <= 5)
    {
        correct = 0;
        printf(" \t| HINT : %s\n", hint);
        printf(" \t| Please enter your guess :  ");
        player_guessed = getche();
        for (j = 0; j < n; j++)
        {
            if (player_guessed == word[j])
            {
                temp[j] = word[j];
                correct = 1;
                guess++;
            }
        }

        if (correct != 1)
        {
            printf(" \t|\n");
            printf(" \n\t|\tYour letter %c is not in the world, Guess another letter.\n",
player_guessed);
            lives--;
            printBody(lives);
        }
        printf("\n");
        printf("\n");

        for (i = 0; i < n; i++)
        {
            printf("\t   %c", temp[i]);
        }
        printf("\n");
        printf("\n");
        if (guess == n)
        {
            printf(" \t|\n");
            printf(" \t|  CONGRATULATIONS!!!!!!,You Have Guessed The Word %s Correctly\n", word);
            break;
        }
        if (lives == 0)
        {
            printf(" \t|\n\n");
            printf(" \t|  SORRY, YOU ARE HANGED:((\n");
            printf(" \t|  BETTER LUCK NEXT TIME!\n");
            printf(" \t|  The word you had to guess was : %s", word);
            break;
        }
    }
    printf("\n\n\n\t\t\t\t\t\t\t\t\tPress any key to continue......");
    getch();
    Hangman();

    return 0;
}

char *personality()
{
```

```c
    srand(time(0));
    static char word[20];
    char words[][16] = {
        "timid",
        "cranky",
        "boaster",
        "gullible",
        "stubborn",
        "braggart",
        "bigmouth",
        "tattletale",
        "babbler",
        "sidekick",
        "arrogant",
        "exaggerate",
        "affable",
        "understate",
        "blabbermouth"};
    int randomindex = rand() % 15;
    strcpy(word, words[randomindex]);
    return word;
}

char *personalityHint(char word[])
{
    static char hint[100];
    if (strcmp(word, "timid") == 0)
    {
        strcpy(hint, "Lajalu,darpok");
    }
    else if (strcmp(word, "cranky") == 0)
    {
        strcpy(hint, "Jhagadalu.");
    }
    else if (strcmp(word, "boaster") == 0)
    {
        strcpy(hint, "Gafadi manxe");
    }
    else if (strcmp(word, "gullible") == 0)
    {
        strcpy(hint, "Sajilai thagine manxe.");
    }
    else if (strcmp(word, "stubborn") == 0)
    {
        strcpy(hint, "Jidii...");
    }
    else if (strcmp(word, "braggart") == 0)
    {
        strcpy(hint, "Dhag dhekhaune manxe..");
    }
    else if (strcmp(word, "tattletale") == 0)
    {
        strcpy(hint, "Kuraute.");
    }
    else if (strcmp(word, "babbler") == 0)
    {
        strcpy(hint, "Bhakbhake...");
    }
    else if (strcmp(word, "sidekick") == 0)
    {
        strcpy(hint, "Kunai manxe ko chamcha..");
    }
    else if (strcmp(word, "arrogant") == 0)
    {
        strcpy(hint, "Ghamandi");
    }
    else if (strcmp(word, "exaggerate") == 0)
    {
        strcpy(hint, "Sano kura lai thulo banaune");
    }
    else if (strcmp(word, "affable") == 0)
    {
        strcpy(hint, "milne manxe, milan saar");
    }
    else if (strcmp(word, "understate") == 0)
    {
        strcpy(hint, "Ghatayera bolne...");
    }
    else if (strcmp(word, "bigmouth") == 0)
    {
        strcpy(hint, "Thulo kura garne.");
    }
    else if (strcmp(word, "blabbermouth") == 0)
    {
        strcpy(hint, "Secret kura bhani halne.");
    }
    return hint;
```

```c
}
char *MedicalName()
{
    srand(time(0));
    static char word[20];
    char words[][20] = {
        "opthalmologist",
        "dermatologist",
        "cardiologist",
        "pendiatrician",
        "geriatricial",
        "orthopedic",
        "gastroenterologist",
        "psyciatrist",
        "hematologist",
        "radiologist",
        "pulmonologist",
        "oncologist",
        "neurologist",
        "dentist"};
    int randomindex = rand() % 14;
    strcpy(word, words[randomindex]);
    return word;
}

char *MedicalNameHint(char word[])
{
    static char hint[100];
    if (strcmp(word, "opthalmologist") == 0)
    {
        strcpy(hint, "Eye doctor");
    }
    else if (strcmp(word, "dermatologist") == 0)
    {
        strcpy(hint, "Skin and Hair doctor");
    }
    else if (strcmp(word, "cardiologist") == 0)
    {
        strcpy(hint, "Heart doctor");
    }
    else if (strcmp(word, "pendiatrician") == 0)
    {
        strcpy(hint, "Children doctor.");
    }
    else if (strcmp(word, "geriatricial") == 0)
    {
        strcpy(hint, "Eldery people doctor.");
    }
    else if (strcmp(word, "orthopedic") == 0)
    {
        strcpy(hint, "Bone doctor.");
    }
    else if (strcmp(word, "gastroenterologist") == 0)
    {
        strcpy(hint, "Digestive System doctor.");
    }
    else if (strcmp(word, "psyciatrist") == 0)
    {
        strcpy(hint, "Doctor who treats mental/lunatic/mad people.");
    }
    else if (strcmp(word, "hematologist") == 0)
    {
        strcpy(hint, "Doctor who treats blood related disease.");
    }
    else if (strcmp(word, "radiologist") == 0)
    {
        strcpy(hint, "One who performs X-ray.");
    }
    else if (strcmp(word, "pulmonologist") == 0)
    {
        strcpy(hint, "Doctor who treats respiratory disease.");
    }
    else if (strcmp(word, "oncologist") == 0)
    {
        strcpy(hint, "Doctor who treats Cancer patients.");
    }
    else if (strcmp(word, "neurologist") == 0)
    {
        strcpy(hint, "Doctor who treats nerve related disease.");
    }
    else if (strcmp(word, "dentist") == 0)
    {
        strcpy(hint, "Doctor who treats teeth disease.");
    }
    return hint;
}
```

5.20 tictactoe.h File Reference

This file is related with coded of tictactoe game.

```
#include <stdio.h>
#include <stdlib.h>
#include <ctype.h>
#include <time.h>
#include <conio.h>
#include <string.h>
#include <windows.h>
```

Functions

- void resetBoard ()

    for resetting the board for new game
- void printBoard ()

    for printing the board every time the users input their move in multi player
- int checkFreeSpaces ()

    checking spaces if no space left and no one wins
- void player1Move ()

    player one move in multiPlayer
- void player2Move ()

    player 2 move in multi player
- void playerMove ()

    single player move against computer
- void computerMove ()

    Random move by the computer.
- char checkWinner ()

    checking if anyone won the game
- void printWinner (char winner)

    printing the winner
- void singlePlayer ()

    single user human and computer---—
- void multiPlayer ()

    playing 2 peron with math problems---—
- void winnerFrom2 (char humanWinner)

    winner from multi player
- int problem ()

    function creating random math problem
- void play ()

    play function---—
- void level ()
- void category ()

    to choose the category of the game--—
- void ticabout ()

    about functon---—
- void ticTitle ()
- int Tictactoe ()

Variables

- char board [3][3]
- const char PLAYER = 'X'
- const char COMPUTER = 'O'
- char PLAYER1
- char PLAYER2
- char player1Name [25]
- char player2Name [25]
- int chooseLevel
- int chooseCategory

5.20.1 Detailed Description

This file is related with coded of tictactoe game.

See also

Tictactoe()

5.20.2 Function Documentation

5.20.2.1 category()

```
void category ( )
```

to choose the category of the game--—

5.20.2.2 checkFreeSpaces()

```
int checkFreeSpaces ( )
```

checking spaces if no space left and no one wins

5.20.2.3 checkWinner()

```
char checkWinner ( )
```

checking if anyone won the game

check rows

check columns

check diagnols

5.20.2.4 computerMove()

```
void computerMove ( )
```

Random move by the computer.

creates a seed based on current time

5.20.2.5 level()

```
void level ( )
```

5.20.2.6 multiPlayer()

```
void multiPlayer ( )
```

playing 2 peron with math problems---—

Ask if player wants to give names--—

if no one is the winner and space is left then player one making move--------------------------—

if player 1 plays first--—

if the name is given by the players

if player 2 wants to play first

if the name is given by the players

5.20.2.7 play()

```
void play ( )
```

play function---—

5.20.2.8 player1Move()

```
void player1Move ( )
```

player one move in multiPlayer

5.20.2.9 player2Move()

```
void player2Move ( )
```

player 2 move in multi player

5.20.2.10 playerMove()

```
void playerMove ( )
```

single player move against computer

5.20.2.11 printBoard()

```
void printBoard ( )
```

for printing the board every time the users input their move in multi player

extra large board

5.20.2.12 printWinner()

```
void printWinner (
             char winner )
```

printing the winner

5.20.2.13 problem()

```
int problem ( )
```

function creating random math problem

Generate two random numbers between 1 and 10

medium level

hard level

easy level

Print the math problem

Read the user's answer

Check if the answer is correct for subtraction

Check if the answer is correct for multiplication

Check if the answer is correct for division

Note

> only integer value is considered as answer

Check if the answer is correct for addition

5.20.2.14 resetBoard()

```
void resetBoard ( )
```

for resetting the board for new game

5.20.2.15 singlePlayer()

```
void singlePlayer ( )
```

single user human and computer--
—

5.20.2.16 ticabout()

```
void ticabout ( )
```

about functon---—

5.20.2.17 Tictactoe()

```
int Tictactoe ( )
```

5.20.2.18 ticTitle()

```
void ticTitle ( )
```

5.20.2.19 winnerFrom2()

```
void winnerFrom2 (
             char humanWinner )
```

winner from multi player

5.20.3 Variable Documentation

5.20.3.1 board

```
char board[3][3]
```

5.20.3.2 chooseCategory

```
int chooseCategory
```

5.20.3.3 chooseLevel

```
int chooseLevel
```

5.20.3.4 COMPUTER

```
const char COMPUTER = 'O'
```

5.20.3.5 PLAYER

```
const char PLAYER = 'X'
```

5.20.3.6 PLAYER1

```
char PLAYER1
```

5.20.3.7 player1Name

```
char player1Name[25]
```

5.20.3.8 PLAYER2

```
char PLAYER2
```

5.20.3.9 player2Name

```
char player2Name[25]
```

5.21 tictactoe.h

Go to the documentation of this file.

```
#include <stdio.h>
#include <stdlib.h>
#include <ctype.h>
#include <time.h>
#include <conio.h>
#include <string.h>
#include <windows.h>

char board[3][3];
const char PLAYER = 'X';
const char COMPUTER = 'O';
char PLAYER1;
char PLAYER2;
char player1Name[25], player2Name[25];
int chooseLevel, chooseCategory;

void resetBoard();
void printBoard();
int checkFreeSpaces();
void player1Move();
void player2Move();
void playerMove();
void computerMove();
char checkWinner();
void printWinner(char winner);
void singlePlayer();
void multiPlayer();
void winnerFrom2(char humanWinner);
int problem();
void play();
void level();
void category();
void ticabout();
void ticTitle();

void ticTitle()
{
    printf("\t\t ||||||||||||||  ||||  ||||||||||       |||||||||||||||  |||||||||||||  ||||||||||
||||||||||||||| |||||||||||||  |||||||||\n");
    printf("\t\t      ||||       ||||  ||||                  ||||        ||||     ||||  ||||
||||      ||||    ||||  ||||      \n");
    printf("\t\t      ||||       ||||  ||||                  ||||        ||||     ||||  ||||
||||      ||||    ||||  ||||      \n");
    printf("\t\t      ||||       ||||  ||||        _____     ||||        ||||_____||||  ||||
_____      ||||      ||||    ||||  |||||||||\n");
    printf("\t\t      ||||       ||||  ||||                  ||||        |||||||||||||  ||||
||||      ||||    ||||  ||||      \n");
    printf("\t\t      ||||       ||||  ||||                  ||||        ||||     ||||  ||||
||||      ||||    ||||  ||||      \n");
    printf("\t\t      ||||       ||||  ||||||||||            ||||        ||||     ||||  ||||||||||
||||      ||||||||||||  |||||||||\n");
}

int Tictactoe()
{
    system("cls");
    int choice;
    printf("\n\n");
    printf("\tTic-Tac-Toe The Mathematical Game.....");
    printf("\n\n");
    printf("\n\n");
    ticTitle();
    printf("\n\n");
    printf("\n\t\t\t----------------------------------------------- TIC-TAC-TOE MENU
------------------------------------------------------");
    printf("\n\n");
    printf("\n\n");
    printf("\n\t\t\t\t  1.PLAY\n\t\t\t  2.ABOUT\n\t\t\t  3.QUIT\n");
    printf("\n\n\n\n\n\t\t\t\t\t\t\tEnter your choice, Mr.player: ");
    scanf("%d", &choice);
    fgetc(stdin);

    switch (choice)
    {
    case 1:
        play();
        break;

    case 2:
        ticabout();
        Tictactoe();
        break;

    case 3:
        system("cls");
        menu();
        break;

    default:
        printf("\n\n\n\n\n");
        printf("\t\t\t\t\t\t\t\t\t\t\t");
        printf("Invalid comand!");
        Sleep(1500);
        system("cls");
        Tictactoe();
    }

    return 0;
}


void ticabout()
{
    system("cls");
    printf("\n\n");
    printf("\tTic-Tac-Toe The Mathematical Game.....");
    printf("\n\n");
    printf("\n\n");
    printf("\n\n");

    ticTitle();
    printf("\n\n");
    printf("\n\t\t\t--------------------------------------------- ABOUT SECTION
---------------------------------------------------");
    printf("\n\n");
    Sleep(1000);
    printf("\n\n");
    printf(" \t\t     About the game:::                              \n");
    printf("
\t\t======================================================================================================================
    printf(" \t\t|  -The goal of the game is for players to position their marks so that they make a
continuous line of three cells vertically,      |\n");
    printf(" \t\t|   horizontally, or diagonally.
|\n");
    printf(" \t\t|  -The player who succeeds in placing three of their marks in a horizontal,
vertical, or diagonal row is the winner,                |\n");
    printf(" \t\t|  -TicTacToe can be played both single and multi Player, In single Player you play
with Computer and in multi Player,               |\n");
    printf(" \t\t|   Player needs a partner to play,
|\n");
    printf(" \t\t|  -In multi Player, the Player's have to solve mathematical problems to make a move,
|\n");
    printf(" \t\t|  -For every wrong answer, If player answer is wrong then individual have to skip a
particular problem move,                       |\n");
    printf("
\t\t======================================================================================================================
    printf("\n");
    printf("\n");
    Sleep(500);
    printf(" \t\t How to play:::\n");
    printf("
\t\t=====================================================================================\n");
    printf(" \t\t| -> Select to play with computer or human,
|\n");
    printf(" \t\t| -> While playing with computer if player succeeds in placing three of their
|\n");
    printf(" \t\t|    marks a horizontal, vertical, or diagonal row the players win,
|\n");
    printf(" \t\t| -> While playing with human, Enter your names(Optional),
|\n");
    printf(" \t\t| -> Choose category Addition,Subtraction or Multiplication,
|\n");
    printf(" \t\t| -> Choose Level Easy, Medium or Hard,
|\n");
    printf(" \t\t| -> Choose your sign i.e 'X' || 'O',
|\n");
    printf(" \t\t| -> Solve the given problem to make your, if answer is wrong you would have to
|\n");
    printf(" \t\t|    skip the move.
|\n");
    printf(" \t\t| -> ENJOY PLAYING!
|\n");
    printf("
\t\t====================================================================================\n");
    Sleep(500);
    printf("\n");
    printf("\n");
    printf(" \t\t Rules for the game:::                               \n");
    printf(" \t\t======================================================================\n");
    printf(" \t\t|  <1> You cannot redo your move,                                    |\n");
    printf(" \t\t|  <2> While entring name only enter first name,                     |\n");
    printf(" \t\t|  <3> Under division category only enter your answer before decimal,|\n");
    printf(" \t\t|  <4> player can’t make a move if they couldn’t solve the problem,  |\n");
    printf(" \t\t|  <5> Player are not expected to quit the running game.             |\n");
    printf(" \t\t======================================================================");
    printf("\n\n\n\t\t\t\t\t\t\t\t\tPress any key to continue......");
    getch();
    printf("\n\n");
}

void play()
{
    system("cls");
    printf("\n\n");
    printf("\tTic-Tac-Toe The Mathematical Game.....");
    int playChoice;
    printf("\n\n");
    printf("\n\n");

    ticTitle();
    printf("\n\n");
    printf("\n\t\t\t    ------------------------------------------------ MODES
---------------------------------------------------");
    printf("\n\n");
    printf("\n\n");
    printf("\n\t\t\t  1.COMPUTER\n\t\t\t  2.HUMAN\n\t\t\t  3.BACK\n");
    printf("\n\n\n\n\n\t\t\t\t\t\t\tWhom do you want to play with ... : ");

    scanf("%d", &playChoice);
    fgetc(stdin);

    switch (playChoice)
    {
    case 1:
        singlePlayer();
        break;

    case 2:
        multiPlayer();
        break;
    case 3:
        Tictactoe();
        break;

    default:
        printf("\n\n");
        printf("\t\t\t\t\t\t\t\t\t\t\t");
        printf("Invalid command!");
        Sleep(1000);
        system("cls");
        play();
    }
}

void level()
{

    system("cls");
    printf("\n\n");
    printf("\tTic-Tac-Toe The Mathematical Game.....");
    printf("\n\n\n\n");
    printf("\t\t\t---------------------------------------------- LEVELS
--------------------------------------------------------");
    printf("\n");
    printf("\n");
    printf("\n\n");
    printf("\t\t\t  1.Easy");
    printf("\n");
    printf("\t\t\t  2.Medium");
    printf("\n");
    printf("\t\t\t  3.Hard");
    printf("\n");
    printf("\t\t\t  4.Back");
    printf("\n");
    printf("\n\n");
    printf("\n\n\t\t\t\t\t  Enter your choice ... :");
    scanf("%d", &chooseLevel);
    fgetc(stdin);

    switch (chooseLevel)
    {
    case 1:
        break;

    case 2:
        break;

    case 3:
        break;

    case 4:
        category();
        break;

    default:
        printf("\n\n");
        printf("\t\t\t\t\t\t\t\t\t\t\t");
        printf("Invalid command!");
        Sleep(1000);
        system("cls");
        level();
    }
}

void category()
{
    system("cls");
    printf("\n\n");
    printf("\tTic-Tac-Toe The Mathematical Game.....");
    printf("\n\n\n\n");
    printf("\t\t\t---------------------------------------------- CATAGORIES
--------------------------------------------------------");
    printf("\n");
    printf("\n");
    printf("\t\t\t  1.Addition");
    printf("\n");
    printf("\t\t\t  2.Subtraction");
    printf("\n");
    printf("\t\t\t  3.Multiplication");
    printf("\n");
    printf("\t\t\t  4.Division");
    printf("\n");
    printf("\t\t\t  5.Back");
    printf("\n");
    printf("\n\n");
    printf("\n\n\t\t\t\t\t\t  Enter your choice ... :");
    scanf("%d", &chooseCategory);
    fgetc(stdin);
    switch (chooseCategory)
    {
    case 1:

        level();
        break;

    case 2:
        level();
        break;

    case 3:
        level();
        break;

    case 4:
        level();
        break;

    case 5:
        play();
        break;

    default:
        printf("\n\n");
        printf("\t\t\t\t\t\t\t\t\t\t\t");
        printf("Invalid command!");
        Sleep(1000);
        system("cls");
        category();
    }
}

void singlePlayer()
{
    char winner = ' ';
    char response;
    do
    {
        if (response == 'Y')
        {
            system("cls");
            singlePlayer();
        }
        winner = ' ';
        response = ' ';
        resetBoard();

        while (winner == ' ' && checkFreeSpaces() != 0)
        {
            system("cls");
            printBoard();

            playerMove();
            winner = checkWinner();
            if (winner != ' ' || checkFreeSpaces() == 0)
            {
                break;
            }

            computerMove();
            winner = checkWinner();
            if (winner != ' ' || checkFreeSpaces() == 0)
            {
                break;
            }
        }
        system("cls");

        printBoard();
        printWinner(winner);
        printf("\n\n\n");
        printf("\t\t\t\t\t\t\t     Would you like to play again? (Y/N):");
        scanf(" %c", &response);
        response = toupper(response);

    } while (response == 'Y');
    play();
}

void multiPlayer()
{
    char enterNames;
    int xo;
    system("cls");
    printf("\n\n");
    printf("\tTic-Tac-Toe The Mathematical Game.....");
    printf("\n\n\n\n");
    printf("\t\t\t----------------------------------------------ENJOY THE GAME WITH
FRIENDS--------------------------------------------------------");
    printf("\n\n\n\n");

    printf("\n");
    printf("\n\t\t\t\tDo you want to enter the names of player (y/n) ?");
    scanf(" %c", &enterNames);
    enterNames = toupper(enterNames);

    if (enterNames == 'Y')
    {

        system("cls");
        printf("\n\n");
        printf("\tTic-Tac-Toe The Mathematical Game.....");
        printf("\n\n\n\n");
        printf("\t\t\t---------------------------------------------- AUTHENTICATION
--------------------------------------------------------");

        printf("\n");
        printf("\n");
        printf(" \t\t\t NOTE:                               \n");
        printf("
\t\t\t\t============================================================================================\n");
        printf(" \t\t\t\t|  <1> Only First name is taken,
|\n");
        printf(" \t\t\t\t|  <2> If space is given while entering the names,it will be considered two
different names,|\n");
        printf(" \t\t\t\t|  <3> Player can't make a move if they couldn't solve the problem,
|\n");
        printf(" \t\t\t\t|  <4> Player are not expected to quit the running game.
|\n");
        printf("
\t\t\t\t============================================================================================");
```

```
        printf("\n\n\n\n");
        printf("\n\t\t\t\tPlayers Naming Time,");
        printf("\n\n");
        printf("\n\t\t\t\t    Enter Player 1 Name : ");
        scanf("%s", player1Name);
        printf("\n");
        printf("\n\t\t\t\t    Enter Player 2 Name : ");
        scanf("%s", player2Name);
    }
    else
    {
        strcpy(player1Name, "Player-1");
        strcpy(player2Name, "Player-2");
    }

    category();

chooseMove:
restoringName:
renamePlayer:
    system("cls");
    printf("\n\n");
    printf("\tTic-Tac-Toe The Mathematical Game.....");
    printf("\n\n\n\n");
    printf("\t\t\t----------------------------------------------- DECISION MAKING ---------------------------------------------------------");
    printf("\n");
    printf("\n");
    printf("\n\t\tWho will make a movie first,");
    printf("\n\n");
    printf("\n\t\t\t   1.%s", player1Name);
    printf("\n\t\t\t   2.%s", player2Name);
    printf("\n\t\t\t   3.Back");
    printf("\n\n");
    printf("\n\n\t\t\t  Enter your choice ... :");
    scanf("%d", &xo);
    fgetc(stdin);

    if (xo == 1)
    {

        while (PLAYER1 != 'X' || PLAYER1 != 'O')
        {
        a:
            printf("\n\n");
            printf("\n\t\t\t  %s choose 'x' or 'o' .. :", player1Name);
            scanf(" %c", &PLAYER1);
            PLAYER1 = toupper(PLAYER1);
            if (PLAYER1 == 'X')
            {
                PLAYER2 = 'O';
                break;
            }
            else if (PLAYER1 == 'O')
            {
                PLAYER2 = 'X';
                break;
            }
            else
            {
                printf("\n");
                printf("\t\t\t\t\t\t   Not an default sign!");
                goto a;
            }
        }
    }

    else if (xo == 2)
    {
        do
        {
        b:
            printf("\n\n");
            printf("\n\t\t\t  %s choose 'x' or 'o' .. :", player2Name);
            scanf(" %c", &PLAYER2);
            PLAYER2 = toupper(PLAYER2);
            if (PLAYER2 == 'X')
            {
                PLAYER1 = 'O';
                break;
            }
            else if (PLAYER2 == 'O')
            {
                PLAYER1 = 'X';
                break;
            }
            else
            {
                printf("\n");
                printf("\t\t\t\t\t\t   Not an default sign!");
                goto b;
            }

        } while (PLAYER2 != ’O’ || PLAYER2 != ’X’);
    }
    else if (xo == 3)
    {
        play();
    }
    else
    {
        printf("\n\n");
        printf("\t\t\t\t\t\t   Invalid input!");
        printf("\n");
        printf("\t\t\t\t\t\t   Choose 1 || 2");
        printf("\n\n");
        Sleep(2000);
        goto chooseMove;
    }

    char humanWinner = ’ ’;
    char response = ’ ’;
    int game = 0;
    do
    {
        if (response == ’Y’)
        {
            char restoreName;
            system("cls");
            printf("\n\n");
            printf("\tTic-Tac-Toe The Mathematical Game.....");
            printf("\n\n\n\n");
            printf("\t\t\t---------------------------------------------- DECISION MAKING
--------------------------------------------------------");
            printf("\n\n");
            printf("\n\t\t\t  Who is playing?");
            printf("\n\n");
            printf("\t\t\t\t");
            printf("  %s and %s (y/n) ?", player1Name, player2Name);
            scanf(" %c", &restoreName);

            restoreName = toupper(restoreName);
            if (restoreName == ’Y’)
            {

                goto restoringName;
            }
            else
            {
                system("cls");
                printf("\n\n");
                printf("\tTic-Tac-Toe The Mathematical Game.....");
                printf("\n\n\n\n");
                printf("\t\t\t---------------------------------------------- RENAMING
--------------------------------------------------------");

                printf("\n\n\n\n");
                printf("\n\t\t\t\t Rename ’%s’ :", player1Name);
                scanf("%s", player1Name);
                printf("\n\n");
                printf("\n\t\t\t\t Rename ’%s’ :", player2Name);
                scanf("%s", player2Name);
                goto renamePlayer;
            }
        }
        humanWinner = ’ ’;
        response = ’ ’;
        resetBoard();


        if (xo == 1)
        {

            while (humanWinner == ’ ’ && checkFreeSpaces() != 0)
            {
                system("cls");
                printBoard();


                printf("\t\t\t\t   Problem for ’%c’ (%s),", PLAYER1, player1Name);
                printf("\n");
                if (problem() == 1)
                {
                    system("cls");
                    printBoard();
                    printf("\t\t\t\t   ’%s’ ’%c’ can now make a move:", player1Name, PLAYER1);
                    printf("\n");
                    player1Move();
                    humanWinner = checkWinner();
                    if (humanWinner != ’ ’ || checkFreeSpaces() == 0)
                    {
                        break;
                    }
                }
                else
                {
                    system("cls");
                    printf("\n\n\n\n\n\n\n\n\n");
                    printf("\n\n\n\n\n\n\n\n\n");
                    printf("\t\t\t\t\t\t\t");
                    printf("Sorry! (%s) your answer is wrong you have to skip a ’%c’ move", player1Name, PLAYER1);
                    printf("\n\n");
                    printf("\t\t\t\t\t\t\t\t\t");
                    printf("Enter any key to continue ... ");
                    getch();
                }

                system("cls");
                printBoard();
                printf("\n\n");
                printf("\t\t\t\t   Problem for ’%c’ (%s),", PLAYER2, player2Name);
                printf("\n");
                if (problem() == 1)
                {
                    system("cls");
                    printBoard();
                    printf("\t\t\t\t   ’%s’ ’%c’ can now make a move:", player2Name, PLAYER2);
                    printf("\n");
                    player2Move();
                    humanWinner = checkWinner();
                    if (humanWinner != ’ ’ || checkFreeSpaces() == 0)
                    {
                        break;
                    }
                }
                else
                {
                    system("cls");
                    printf("\n\n\n\n\n\n\n\n\n");
                    printf("\n\n\n\n\n\n\n\n\n");
                    printf("\t\t\t\t\t\t\t");
                    printf("Sorry! (%s) your answer is wrong you have to skip a ’%c’ move", player1Name, PLAYER1);
                    printf("\n\n");
                    printf("\t\t\t\t\t\t\t\t\t");
                    printf("Enter any key to continue ... ");
                    getch();
                }
            }
        }

        else
        {

            while (humanWinner == ’ ’ && checkFreeSpaces() != 0)
            {
                system("cls");
                printBoard();


                system("cls");
                printBoard();
                printf("\n\n");
                printf("\t\t\t\t   Problem for ’%c’ (%s),", PLAYER2, player2Name);
                printf("\n");
                if (problem() == 1)
                {
                    system("cls");
                    printBoard();
                    printf("\t\t\t\t   ’%s’ ’%c’ can now make a move:", player2Name, PLAYER2);
                    printf("\n");
                    player2Move();
                    humanWinner = checkWinner();
                    if (humanWinner != ’ ’ || checkFreeSpaces() == 0)
                    {
                        break;
                    }
                }
                else
                {
                    system("cls");
                    printf("\n\n\n\n\n\n\n\n\n\n");
                    printf("\n\n\n\n\n\n\n\n\n\n");
                    printf("\t\t\t\t\t\t\t\t");
                    printf("Sorry! (%s) your answer is wrong you have to skip a '%c' move", player2Name, PLAYER2);
                    printf("\n\n");
                    printf("\t\t\t\t\t\t\t\t\t\t\t");
                    printf("Enter any key to continue ...  ");
                    getch();
                }

                printf("\n\n");
                printf("\t\t\t\t   Problem for '%c' (%s):", PLAYER1, player1Name);
                printf("\n");
                if (problem() == 1)
                {
                    system("cls");
                    printBoard();
                    printf("\t\t\t\t   '%s' '%c' can now make a move:", player1Name, PLAYER1);
                    printf("\n");
                    player1Move();
                    humanWinner = checkWinner();
                    if (humanWinner != ' ' || checkFreeSpaces() == 0)
                    {
                        break;
                    }
                }
                else
                {
                    system("cls");
                    printf("\n\n\n\n\n\n\n\n\n\n");
                    printf("\n\n\n\n\n\n\n\n\n\n");
                    printf("\t\t\t\t\t\t\t\t");
                    printf("Sorry! (%s) your answer is wrong you have to skip a '%c' move", player1Name, PLAYER1);
                    printf("\n\n");
                    printf("\t\t\t\t\t\t\t\t\t\t\t");
                    printf("Enter any key to continue ... ");
                    getch();
                }
            }
        }

        system("cls");
        printBoard();
        winnerFrom2(humanWinner);
        printf("\n\n\n");
        printf("\t\t\t\t\t\t\t     Would you like to play again? (Y/N):");
        scanf(" %c", &response);
        response = toupper(response);
        game++;
    } while (response == 'Y');
    play();
}

void playerMove()
{

    int x, y;

    do
    {
        printf("\t\t\t\t    Enter row number #(1-3) : ");
        scanf("%d", &x);
        x--;
        printf("\t\t\t\t    Enter column number #(1-3) : ");
        scanf("%d", &y);
        y--;

        if (board[x][y] != ' ')
        {
            printf("\n\n");
            printf("\t\t\t\t\t\t\t\t         Invalid move!");
            printf("\n\n");
        }

        else
        {
            board[x][y] = PLAYER;
            break;
        }

    } while (board[x][y] != ' ');
};

void player1Move()
```

```
{

    int x, y;

    do
    {
        printf("\t\t\t\t    Enter row number #(1-3) for '%c' (%s):", PLAYER1, player1Name);
        scanf("%d", &x);
        x--;

        printf("\t\t\t\t    Enter column number #(1-3) for '%c' (%s):", PLAYER1, player1Name);
        scanf("%d", &y);
        y--;

        if (board[x][y] != ' ')
        {

            printf("\n\n");
            printf("\t\t\t\t\t\t\t\t         Invalid move!");
            printf("\n\n");
        }

        else
        {
            board[x][y] = PLAYER1;
            break;
        }

    } while (board[x][y] != ' ');
};

void player2Move()
{

    int x, y;

    do
    {
        printf("\t\t\t\t    Enter row number #(1-3) for '%c' (%s):", PLAYER2, player2Name);
        scanf("%d", &x);
        x--;

        printf("\t\t\t\t    Enter column number #(1-3) for '%c'(%s):", PLAYER2, player2Name);
        scanf("%d", &y);
        y--;

        if (board[x][y] != ' ')
        {

            printf("\n\n");
            printf("\t\t\t\t\t\t\t\t         Invalid move!");
            printf("\n\n");
        }
        else
        {
            board[x][y] = PLAYER2;
            break;
        }

    } while (board[x][y] != ' ');
}

void printBoard()
{

    printf("\n\n");
    printf("\tTic-Tac-Toe The Mathematical Game.....");
    printf("\n\n");
    printf("\n\t\t\t------------------------------------------ CAN YOU BEAT THE OPPONENT
---------------------------------------------------");


    printf("\n\n\n\n\n\n\n");
    printf("\t\t\t\t\t\t\t\t         |         |         \n");
    printf("\t\t\t\t\t\t\t\t         |         |         \n");
    printf("\t\t\t\t\t\t\t\t    %c    |    %c    |    %c    \n", board[0][0], board[0][1],
board[0][2]);
    printf("\t\t\t\t\t\t\t\t         |         |         \n");
    printf("\t\t\t\t\t\t\t\t_________|_________|_________\n");
    printf("\t\t\t\t\t\t\t\t         |         |         \n");
    printf("\t\t\t\t\t\t\t\t         |         |         \n");
    printf("\t\t\t\t\t\t\t\t    %c    |    %c    |    %c    \n", board[1][0], board[1][1],
board[1][2]);
    printf("\t\t\t\t\t\t\t\t         |         |         \n");
    printf("\t\t\t\t\t\t\t\t_________|_________|_________\n");
    printf("\t\t\t\t\t\t\t\t         |         |         \n");
    printf("\t\t\t\t\t\t\t\t         |         |         \n");
    printf("\t\t\t\t\t\t\t\t    %c    |    %c    |    %c   \n", board[2][0], board[2][1],
board[2][2]);
    printf("\t\t\t\t\t\t\t\t         |         |         \n");
    printf("\t\t\t\t\t\t\t\t         |         |         \n");
    printf("\n\n\n");
};

void resetBoard()
{
    int i, j;
    for (i = 0; i < 3; i++)
    {
        for (j = 0; j < 3; j++)
        {
            board[i][j] = ' ';
        }
    }
};

int checkFreeSpaces()
{
    int freeSpaces = 9, i, j;
    for (i = 0; i < 3; i++)
    {
        for (j = 0; j < 3; j++)
        {
            if (board[i][j] != ' ')
            {
                freeSpaces--;
            }
        }
    }
    return freeSpaces;
};

char checkWinner()
{
    int i;

    for (i = 0; i < 3; i++)
    {
        if (board[i][0] == board[i][1] && board[i][0] == board[i][2])
        {

            return board[i][0];
        }
    }

    for (i = 0; i < 3; i++)
    {
        if (board[0][i] == board[1][i] && board[0][i] == board[2][i])
        {

            return board[0][i];
        }
    }


    if (board[0][0] == board[1][1] && board[0][0] == board[2][2])
    {

        return board[0][0];
    }

    if (board[0][2] == board[1][1] && board[0][2] == board[2][0])
    {

        return board[0][2];
    }

    return ' ';
};

void computerMove()
{


    srand(time(0));
    int x, y;
    if (checkFreeSpaces() > 0)
    {
        do
        {
            x = rand() % 3;
            y = rand() % 3;
        } while (board[x][y] != ' ');

        board[x][y] = COMPUTER;
    }
    else
    {
        printWinner(' ');
    }
};

void printWinner(char winner)
{
    if (winner == PLAYER)
    {
        printf("\n\n");
        printf("\t\t\t\t\t\t\t\t  _______ YOU WON! _______");
    }
    else if (winner == COMPUTER)
    {
        printf("\n\n");
        printf("\t\t\t\t\t\t\t\t  _______ YOU LOOSE! _______");
    }

    else
    {
        printf("\n\n");
        printf("\t\t\t\t\t\t\t\t  _______ ITS A TIE! _______");
    }
}

void winnerFrom2(char humanWinner)
{

    if (humanWinner == PLAYER1)
    {
        printf("\n\n");
        printf("\t\t\t\t\t\t\t\t  _______%s YOU WON! _______", player1Name);
    }
    else if (humanWinner == PLAYER2)
    {
        printf("\n\n");
        printf("\t\t\t\t\t\t\t\t  _______%s YOU WON! _______", player2Name);
    }
    else
    {

        printf("\n\n");
        printf("\t\t\t\t\t\t\t\t  _______ ITS A TIE! _______");
    }
}


int problem()
{
    int a, b, answer;


    if (chooseLevel == 2)
    {
        srand(time(NULL));
        a = rand() % 10 + 5;
        b = rand() % 10 + 5;
    }
    else if (chooseLevel == 3)
    {
        srand(time(NULL));
        a = rand() % 15 + 10;
        b = rand() % 15 + 10;
    }
    else
    {
        srand(time(NULL));
        a = rand() % 4 + 1;
        b = rand() % 4 + 1;
    }


    if (chooseCategory == 2)
    {
        printf("\n");
        printf("\t\t\t\t   What is the result of %d - %d ? ", a, b);
    }
    else if (chooseCategory == 3)
    {
        printf("\n");
        printf("\t\t\t\t   What is the result of %d * %d ? ", a, b);
    }
    else if (chooseCategory == 4)
    {
        printf("\n");
        printf("\t\t\t\t   What is the result of %d / %d ? ", a, b);
    }
    else
    {
        printf("\n");
        printf("\t\t\t\t   What is the result of %d + %d ? ", a, b);
    }

    scanf("%d", &answer);


    if (chooseCategory == 2)
    {
        if (answer == a - b)
        {
            return 1;
        }
        else
        {
            return 0;
        }
    }
    else if (chooseCategory == 3)
    {
        if (answer == a * b)
        {
            return 1;
        }
        else
        {
            return 0;
        }
    }
    else if (chooseCategory == 4)
    {
        if (answer == a / b)
        {
            return 1;
        }
        else
        {
            return 0;
        }
    }
    else
    {
        if (answer == a + b)
        {
            return 1;
        }
        else
        {
            return 0;
        }
    }
}
```