OFFLINE JUDGE

By

Md. Raihan Nishat

ID: 182-35-2518

Batch: 26th

Department of Software Engineering

Faculty of Science & Information Technology

Daffodil International University

A course project (SWE 231 : Software Engineering

Project submitted in fulfillment of the requirement for

the degree of Bachelor of Science in Software Engineering .

DECLARATION

==========

It hereby declared that this course project title on "Departmental Store Management

System" under the supervision of Dr. Md. Asraf Ali, Associate Professor, Department

of Software Engineering, Daffodil International University. It is also declared that

neither this project nor any part of this has been submitted elsewhere for award or any

Certified By:

==========

Dr. Md. Asraf Ali

Associate Professor

Department of Software Engineering

Faculty of Science & Information Technology

Daffodil International University

ACKNOWLEDGEMENT

==========

First of all, I am grateful to The Almighty God for giving me the ability to complete this

project. proud Today I am felling for myself. Because, to be a student of Daffodil

International University. And I am thankful to Daffodil International University for giving

me a chance to give me a chance to prove myself by showing this project. I thank to our

Department Head Dr. Touhid Bhuiyan. And I want to thank to our respected class teacher

Dr. Md. Asraf Ali for supporting and given your guideline and valuable advices.

Competitive programming is a mind sport usually held over the Internet or a local network, involving participants trying to program according to provided specifications. Contestants are referred to as sport programmers. Competitive programming is recognized and supported by several multinational software and Internet companies, such as Google[1][2] and Facebook.[3] There are several organizations who host programming competitions on a regular basis.

ABSTRACT

=======

This is project documentation about “OFFLINE JUDGE”.While doing this prject I explored new thing .

I have also improved my programming skill by doing this project.

This project will help a contester to bulid problem solving skill.

The user have to log in with username and password. Without log in user can't enter. User can manage the whole system.

PROJECT OBJECTIVE

==========

This project will help a contester to bulid problem solving skill.

METHODOLOGY

==========

At first needed to be log in with defined password. User is only manager. After

successfully logged in manager can do all the things of this system.

Log in

====

User will give id and password for log in.

Main Menu

========

After successfully entered password manager can use all the option from main menu.

1. HOME

2. LOG OUT

3. PROBLEM SET

4. SUBMIT

5. HINTS

6. ABOUT

7. EXIT

In this option we can use access offline judge.

HOME

====

When we choose no. 1 then it will show us log in page.

LOG OUT

=======

When we choose no. 2 then it will show us log out page.

PROBLEM SET

=========

When we choose no. 3 then it will show us many problem set.

SUBMIT

=====

When we choose no. 4 then it will show problem ID and

You enter problem ID after submit code .

HINTS

====

When we choose no. 5 then it will show all problem hints.

ABOUT

=====

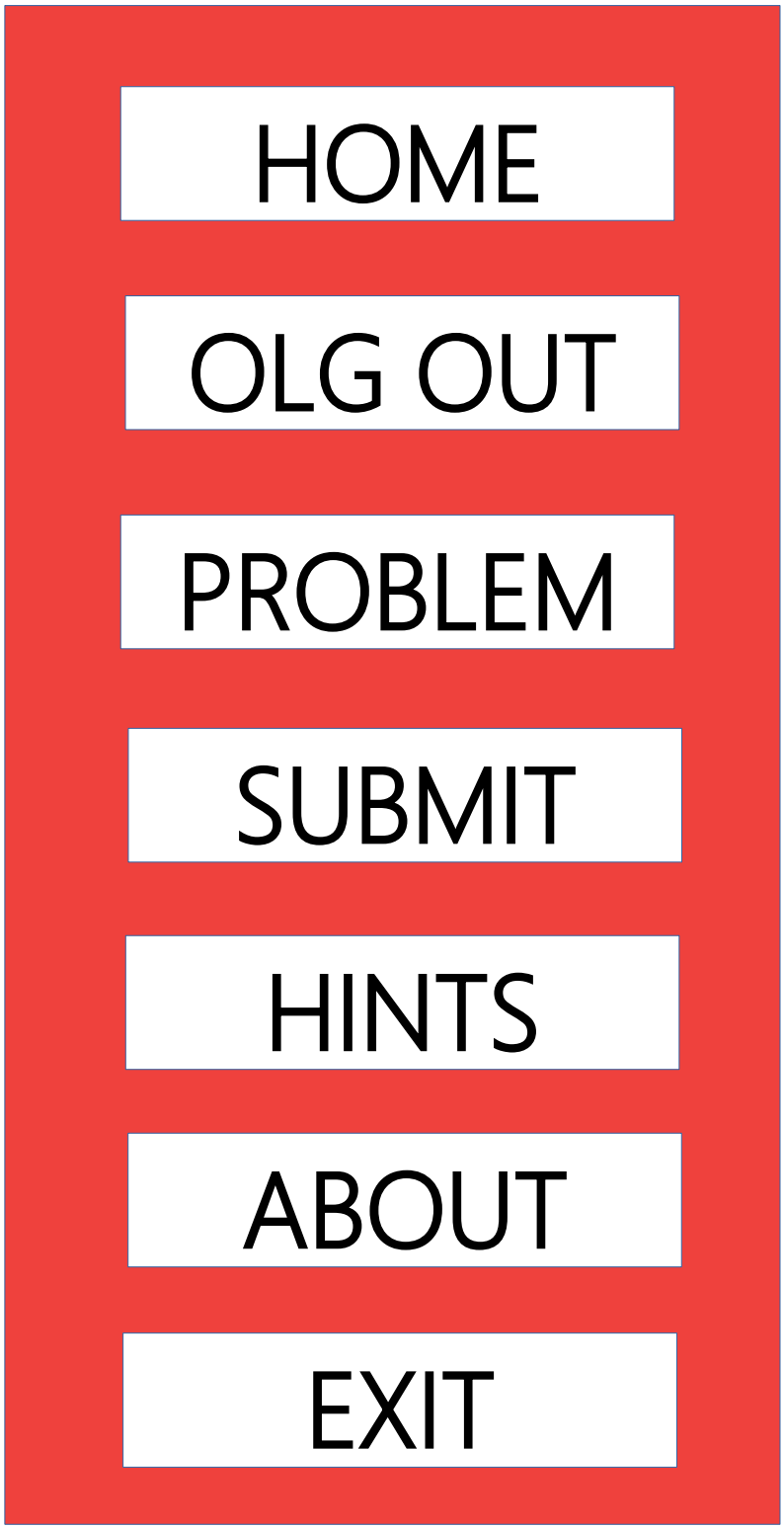
When we choose no. 6 then it will show about this software.

EXIT

===

When we choose no. 7 then software exit.

USE CASE



Functional Requirement :

==========

1. HOME

2. LOG OUT

3. PROBLEM SET

4. SUBMIT

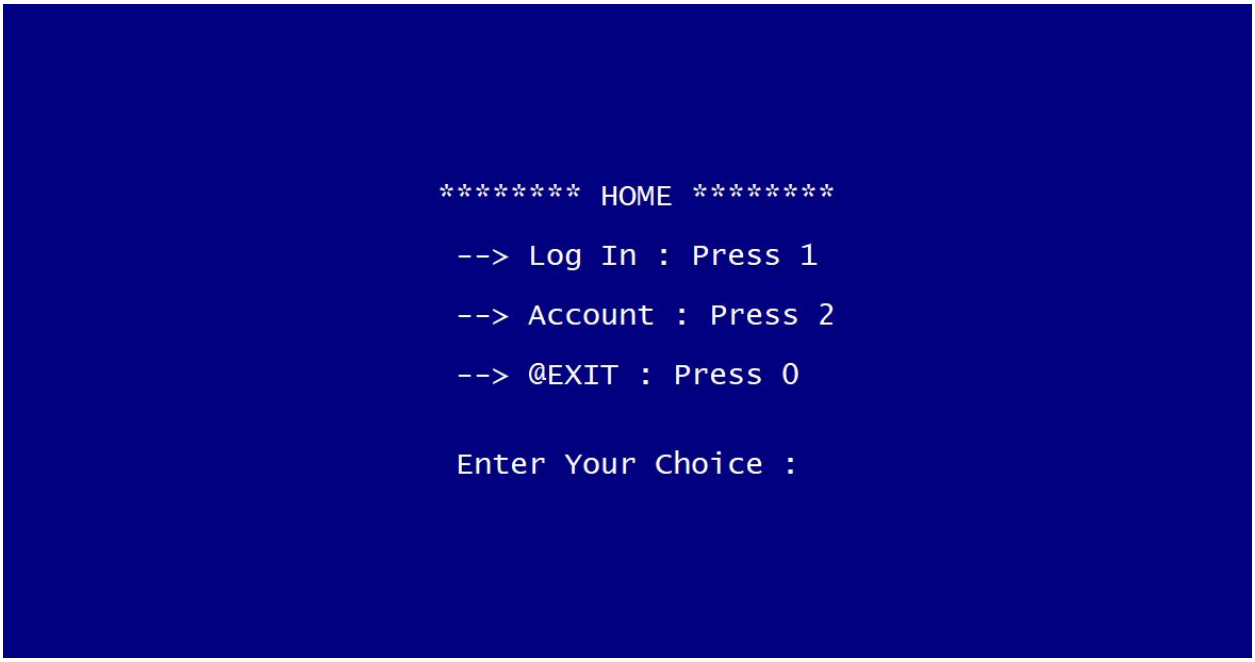
5. HINTS

6. ABOUT

7. EXIT

User can registration or log in with previous id and password.Or can create new id and password.

HOME


******** HOME ********
--> Log In : Press 1
--> Account : Press 2
--> @EXIT : Press 0
Enter Your Choice :

MENU


OFFLINE JUDGE
1. HOME
2. LOG OUT
3. PROBLEM SET
4. SUBMIT
5. HINTS
6. ABOUT
7. EXIT
ENTER COMMAND:

PROBLEM SET

```
          PROBLEMS
=========================

ID: 2518: SCHOOL PHYSICS
ID: 2519: WATERMELON
ID: 2517: THEATRE SQUARE
ID: 2548: NEXT ROUND
ID: 2545: BIT++

=========================

Enter command(BACK->'B'):
```

SUMBIT

```
           SUBMIT
=========================

ID: 2518: SCHOOL PHYSICS
ID: 2519: WATERMELON
ID: 2517: THEATRE SQUARE
ID: 2548: NEXT ROUND
ID: 2545: BIT++

=========================

Enter command(BACK->'B'):
```

ACCEPTED

WRONG ANSWER

CODE

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

#include "judge.h"
#include "home.h"
#include "login.h"
#include "problem.h"
#include "submit.h"
#include "hints.h"
#include "about.h"

void menu()
{
    system("CLS");
    system("COLOR F0");
```

```
home();

char main_command[10];

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

printf("ENTER COMMAND: ");
scanf("%s", &main_command);

if(0 == strcmp(main_command, "2")){
    registration();
}
else if(0 == strcmp(main_command, "3")){
    problem();
}
else if(0 == strcmp(main_command, "4")){
    submit();
}
else if(0 == strcmp(main_command, "5")){
    hints();
}
else if(0 == strcmp(main_command, "6")){
```

```
        about();
    }
    else if(0 == strcmp(main_command, "7")){
        exit(0);
    }
    else if(0 == strcmp(main_command, "1")){
        main();
    }
}

int main()
{
    system("COLOR 1F");
    system("cls");
    int choice;

    printf("\n\n\n\n\n\n");
    printf("\t\t\t******** HOME ********\n");
    printf("\n\t\t\t --> Log In : Press 1\n");
    printf("\n\t\t\t --> Account : Press 2\n");
    printf("\n\t\t\t --> @EXIT : Press 0\n");
```

```
    printf("\n\n\t\t\t Enter Your Choice :  ");
    scanf("%d",&choice);
    system("cls");

    switch(choice)
    {
    case 1 :
        log_in();
        break;
    case 2 :
        registration();
        break;
    case 0 :
    {
        printf("\n\t\t\t\tGOOD BYE !!!\n\n");
        system("pause");
        exit(0);
    }
    break;
    }
}
```

```
void judge_2518()
{
    system("COLOR F0");
    system("CLS");

    int i;
    char judge_command[10];

    FILE *fptr_1 = fopen("2518_out.txt", "r");
    FILE *fptr_2 = fopen("submit_out.txt", "r");

    char line_1[10000], line_2[10000];
    char *str_1 = calloc(10000, sizeof(char));
    char *str_2 = calloc(10000, sizeof(char));

    while(fscanf(fptr_1,"%[^\n]\n", line_1) == 1) {
        strcat(str_1, line_1);
        strcat(str_1, "\n");
    }

    while(fscanf(fptr_2,"%[^\n]\n", line_2) == 1) {
        strcat(str_2, line_2);
```

```
    strcat(str_2, "\n");
}

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

for(i = 1; i <= 25; i++){
    Sleep(100);
    printf("#");
}

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

if(0 == strcmp(str_1, str_2)){
    system("COLOR 2F");
    printf("\t      ");
    printf("Accepted\n");
}
else{
    system("COLOR 4F");
```

```
        printf("\t    ");
        printf("Wrong Answer\n");
    }

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

    printf("Enter command(BACK->'B'): ");
    scanf("%s", &judge_command);

    if(0 == strcmp(judge_command, "B")){
        submit();
    }

    fclose(fptr_1);
    fclose(fptr_2);
}

void judge_2519()
{
    system("COLOR F0");
    system("CLS");
```

```
int i;
char judge_command[10];

FILE *fptr_1 = fopen("2519_out.txt", "r");
FILE *fptr_2 = fopen("submit_out.txt", "r");

char line_1[10000], line_2[10000];
char *str_1 = calloc(10000, sizeof(char));
char *str_2 = calloc(10000, sizeof(char));

while(fscanf(fptr_1,"%[^\n]\n", line_1) == 1) {
    strcat(str_1, line_1);
    strcat(str_1, "\n");
}

while(fscanf(fptr_2,"%[^\n]\n", line_2) == 1) {
    strcat(str_2, line_2);
    strcat(str_2, "\n");
}

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

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

for(i = 1; i <= 25; i++){
    Sleep(100);
    printf("#");
}

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

if(0 == strcmp(str_1, str_2)){
    system("COLOR 2F");
    printf("\t      ");
    printf("Accepted\n");
}
else{
    system("COLOR 4F");
    printf("\t    ");
    printf("Wrong Answer\n");
}

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

```
    printf("Enter command(BACK->'B'): ");
    scanf("%s", &judge_command);

    if(0 == strcmp(judge_command, "B")){
        submit();
    }

    fclose(fptr_1);
    fclose(fptr_2);
}

void judge_2517()
{
    system("COLOR F0");
    system("CLS");

    int i;
    char judge_command[10];

    FILE *fptr_1 = fopen("2517_out.txt", "r");
    FILE *fptr_2 = fopen("submit_out.txt", "r");
```

```
char line_1[10000], line_2[10000];
char *str_1 = calloc(10000, sizeof(char));
char *str_2 = calloc(10000, sizeof(char));

while(fscanf(fptr_1,"%[^\n]\n", line_1) == 1) {
    strcat(str_1, line_1);
    strcat(str_1, "\n");
}

while(fscanf(fptr_2,"%[^\n]\n", line_2) == 1) {
    strcat(str_2, line_2);
    strcat(str_2, "\n");
}

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

for(i = 1; i <= 25; i++){
    Sleep(100);
    printf("#");
```

```
}

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

if(0 == strcmp(str_1, str_2)){
    system("COLOR 2F");
    printf("\t      ");
    printf("Accepted\n");
}
else{
    system("COLOR 4F");
    printf("\t    ");
    printf("Wrong Answer\n");
}

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

printf("Enter command(BACK->'B'): ");
scanf("%s", &judge_command);

if(0 == strcmp(judge_command, "B")){
```

```
        submit();
    }

    fclose(fptr_1);
    fclose(fptr_2);
}

void judge_2545()
{
    system("COLOR F0");
    system("CLS");

    int i;
    char judge_command[10];

    FILE *fptr_1 = fopen("2545_out.txt", "r");
    FILE *fptr_2 = fopen("submit_out.txt", "r");

    char line_1[10000], line_2[10000];
    char *str_1 = calloc(10000, sizeof(char));
    char *str_2 = calloc(10000, sizeof(char));
```

```
while(fscanf(fptr_1,"%[^\n]\n", line_1) == 1) {
    strcat(str_1, line_1);
    strcat(str_1, "\n");
}

while(fscanf(fptr_2,"%[^\n]\n", line_2) == 1) {
    strcat(str_2, line_2);
    strcat(str_2, "\n");
}

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

for(i = 1; i <= 25; i++){
    Sleep(100);
    printf("#");
}

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

```
if(0 == strcmp(str_1, str_2)){
    system("COLOR 2F");
    printf("\t      ");
    printf("Accepted\n");
}
else{
    system("COLOR 4F");
    printf("\t    ");
    printf("Wrong Answer\n");
}

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

printf("Enter command(BACK->'B'): ");
scanf("%s", &judge_command);

if(0 == strcmp(judge_command, "B")){
    submit();
}

fclose(fptr_1);
fclose(fptr_2);
```

```
}

void judge_2548()
{
    system("COLOR F0");
    system("CLS");

    int i;
    char judge_command[10];

    FILE *fptr_1 = fopen("2548_out.txt", "r");
    FILE *fptr_2 = fopen("submit_out.txt", "r");

    char line_1[10000], line_2[10000];
    char *str_1 = calloc(10000, sizeof(char));
    char *str_2 = calloc(10000, sizeof(char));

    while(fscanf(fptr_1,"%[^\n]\n", line_1) == 1) {
        strcat(str_1, line_1);
        strcat(str_1, "\n");
    }
```

```
while(fscanf(fptr_2,"%[^\n]\n", line_2) == 1) {
    strcat(str_2, line_2);
    strcat(str_2, "\n");
}

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

for(i = 1; i <= 25; i++){
    Sleep(100);
    printf("#");
}

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

if(0 == strcmp(str_1, str_2)){
    system("COLOR 2F");
    printf("\t      ");
    printf("Accepted\n");
}
```

```
    else{
        system("COLOR 4F");
        printf("\t    ");
        printf("Wrong Answer\n");
    }

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

    printf("Enter command(BACK->'B'): ");
    scanf("%s", &judge_command);

    if(0 == strcmp(judge_command, "B")){
        submit();
    }

    fclose(fptr_1);
    fclose(fptr_2);
}

void home()
{
    system("COLOR 5F");
```

```
system("CLS");
printf("\n\n\n\n\t\t     ");

printf("\t   OFFLINE JUDGE\n");
printf("\t\t     ========================");
printf("\n\t\t\t     ");

printf("\n\t\t\t  ");
printf(" 1. HOME\n");

printf("\t\t\t  ");
printf(" 2. LOG OUT\n");

printf("\t\t\t  ");
printf(" 3. PROBLEM SET\n");

printf("\t\t\t  ");
printf(" 4. SUBMIT\n");

printf("\t\t\t  ");
printf(" 5. HINTS\n");
```

```
    printf("\t\t\t  ");
    printf(" 6. ABOUT\n");

    printf("\t\t\t  ");
    printf(" 7. EXIT\n");

    printf("\n\t\t     ==========================\
n");
}

void hints()
{
    system("COLOR 0F");
    system("CLS");

    char status_command[10];

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

    printf("\t       HINTS\n");
    printf("\t\t     ==========================");
    printf("\n\t\t    ");
```

```
    strcpy(status_command, "Hints.pdf");
    system(status_command);

    printf("Enter command(BACK->'B'): ");
    scanf("%s", &status_command);

    if(0 == strcmp(status_command, "B")){
        menu();
    }
}

void registration()
{
    system("cls");

    char reg_username[30],reg_pass[30];

    FILE *fp;
    fp=fopen("reg.txt","a");

    if(fp==NULL)
```

```
    {
        printf("Error!");
        exit(1);
    }

    printf("\n\n\n\n\n\n");
    printf("\t\t\t   USER REGISTRATION\n\n");
    printf("\n\t\t\tUSER NAME : ");
    scanf("%s",reg_username);
    printf("\n\t\t\tUSER PASSWORD: ");
    scanf("%s",reg_pass);
    fprintf(fp,"\n%s %s",reg_username,reg_pass);
    fclose(fp);

    printf("\t\t\t\tYour Registration is
successful.\n");
    printf("\t\t\t\tNow its time to login \n ");
    system("cls");
    system("pause");

    menu();
}
```

```
void log_in()
{
    system("CLS");
    char
reg_username[30],reg_pass[30],log_pass[30],log_usern
ame[30],name[30],pass[30];
    int c=0,cnt=0;
    int flag=1,tym_3=3;
    int reg_log_button;

    FILE *fp;

    fp=fopen("reg.txt","r");
    if(fp==NULL)
    {
        printf("Error!");
        exit(1);
    }

    while(flag)
    {
```

```
//login

printf("\n\n\n\n\n\n");
printf("\t\t\t   LOG IN\n\n");
printf("\n\t\t\tUSER NAME : ");
scanf("%s",log_username);


printf("\n\t\t\tUSER PASSWORD: ");
int l=0;
while(l<=9)
{
    log_pass[l]=getch();
    if(log_pass[l]==13)
        break;
    else
        printf("*");
    l++;
}
log_pass[l]='\0';

fp=fopen("reg.txt","r");
```

```
        if(fp==NULL)
        {
            printf("Error!");
            exit(1);
        }

        //comparison
        while(fscanf(fp,"%s %s\n",name,pass)!=EOF){

if((strcmp(log_username,name)==0)&&(strcmp(log_pass,
pass)==0)){
                //if the combination matches value
of c is increased and user id of req user is stored
in user.id
                //system("cls");
                menu();
                //system("pause");
                flag=0;
                break;
            }
        }

        tym_3--;
```

```
        if(flag)
        {
            system("cls");
            printf("Incorrect username or password.
Please try again.\n");
            system("pause");
            fclose(fp);
            system("cls");
            if(tym_3==0)
            {
                printf("\n\t\t\t\tTry again
later . \n");
                break;
            }
        }
    }
}

void problem(){
    system("COLOR 2F");
    system("CLS");

    char problem_command[10];
```

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

printf("\t     PROBLEMS\n");
printf("\t\t     ========================");
printf("\n\t\t\t     ");

printf("\n\t\t  ");
printf("   ID: 2518: SCHOOL PHYSICS\n");

printf("\t\t  ");
printf("   ID: 2519: WATERMELON\n");

printf("\t\t  ");
printf("   ID: 2517: THEATRE SQUARE\n");

printf("\t\t  ");
printf("   ID: 2548: NEXT ROUND\n");

printf("\t\t  ");
printf("   ID: 2545: BIT++\n");
```

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

printf("\n\n\t\t   ");
printf("Enter command(BACK->'B'): ");
scanf("%s", &problem_command);

if(0 == strcmp(problem_command, "B")){
    menu();
}
else if(0 == strcmp(problem_command, "2518")){
    strcpy(problem_command, "E.pdf");
    system(problem_command);
    problem();
}
else if(0 == strcmp(problem_command, "2519")){
    strcpy(problem_command, "A.pdf");
    system(problem_command);
    problem();
}
else if(0 == strcmp(problem_command, "2517")){
    strcpy(problem_command, "B.pdf");
    system(problem_command);
```

```
        problem();
    }
    else if(0 == strcmp(problem_command, "2548")){
        strcpy(problem_command, "C.pdf");
        system(problem_command);
        problem();
    }
    else if(0 == strcmp(problem_command, "2545")){
        strcpy(problem_command, "D.pdf");
        system(problem_command);
        problem();
    }
}

void submit()
{
    system("COLOR 3F");
    system("CLS");

    char submit_command[10];

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

```
printf("\t       SUBMIT\n");
printf("\t\t     ========================");
printf("\n\t\t    ");
printf("\n\t\t  ");
printf("   ID: 2518: SCHOOL PHYSICS\n");

printf("\t\t  ");
printf("   ID: 2519: WATERMELON\n");

printf("\t\t  ");
printf("   ID: 2517: THEATRE SQUARE\n");

printf("\t\t  ");
printf("   ID: 2548: NEXT ROUND\n");

printf("\t\t  ");
printf("   ID: 2545: BIT++\n");
printf("\n\t\t     ========================");

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

```
printf("Enter command(BACK->'B'): ");
scanf("%s", &submit_command);

if(0 == strcmp(submit_command, "B")){
    menu();
}

if(0 == strcmp(submit_command, "2518")){
    strcpy(submit_command, "gcc submit.c");
    system(submit_command);
    strcpy(submit_command, "a.exe");
    system(submit_command);
    judge_2518();
}else if(0 == strcmp(submit_command, "2519")){
    strcpy(submit_command, "gcc submit.c");
    system(submit_command);
    strcpy(submit_command, "a.exe");
    system(submit_command);
    judge_2519();
}
else if(0 == strcmp(submit_command, "2517")){
    strcpy(submit_command, "gcc submit.c");
```

```
        system(submit_command);
        strcpy(submit_command, "a.exe");
        system(submit_command);
        judge_2517();
    }else if(0 == strcmp(submit_command, "2548")){
        strcpy(submit_command, "gcc submit.c");
        system(submit_command);
        strcpy(submit_command, "a.exe");
        system(submit_command);
        judge_2548();
    }
    else if(0 == strcmp(submit_command, "2545")){
        strcpy(submit_command, "gcc submit.c");
        system(submit_command);
        strcpy(submit_command, "a.exe");
        system(submit_command);
        judge_2545();
    }
}

void about()
{
```

```
    system("COLOR F0");
    system("CLS");

    char about_command[10];

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

    printf("\t       ABOUT\n");
    printf("\t\t     ========================");
    printf("\n\t\t    ");

    strcpy(about_command, "about.html");
    system(about_command);

    printf("Enter command(BACK->'B'): ");
    scanf("%s", &about_command);

    if(0 == strcmp(about_command, "B")){
        menu();
    }
}
```