

```
#include <iostream>
#include <string>
using namespace std;

const string ADMIN_PASSWORD = "admin897";
const int MAX_ATTEMPTS = 3;

void adminPanel();
void userPanel();
void adminMenu();
void userMenu();

int main() {
    int main_choice;
    do {
        cout << endl << " MAIN PROGRAM MENU " << endl;
        cout << "1. Admin Panel" << endl;
        cout << "2. User Panel" << endl;
        cout << "3. Exit Program" << endl;
        cout << "Enter choice: ";
        cin >> main_choice;

        switch (main_choice) {
            case 1:
                adminPanel();
                break;
            case 2:
                userPanel();
                break;
            case 3:
                cout << endl << "Exiting the program. Goodbye!" << endl << endl;
                break;
            default:
                cout << endl << "Invalid choice. Please enter 1, 2, or 3." << endl << endl;
                break;
        }
    } while (main_choice != 3);

    return 0;
}

void adminMenu() {
    int adChoice;
    do {
```

```
cout << endl << "--- ADMIN TASKS MENU ---" << endl;
cout << "1. View Database" << endl;
cout << "2. Change Settings" << endl;
cout << "3. Return to Main Menu" << endl;
cout << "Enter task choice: ";
cin >> adChoice;

switch (adChoice) {
    case 1:
        cout << " Displaying secret database info " << endl;
        break;
    case 2:
        cout << " Settings have been changed." << endl;
        break;
    case 3:
        cout << endl << " task complete. " << endl;
        break;
    default:
        cout << endl << "Invalid choice" << endl;
        break;
}
} while (adChoice != 3);
}

void adminPanel() {
    string input_password;
    int attempts = 0;
    cout << endl << "--- ADMIN LOGIN REQUIRED ---" << endl;

    while (attempts < MAX_ATTEMPTS) {
        cout << "Enter Password (Attempt " << attempts + 1
            << " of " << MAX_ATTEMPTS << "): ";
        cin >> input_password;

        if (input_password == ADMIN_PASSWORD) {
            cout << endl << "Password Correct! Access Granted." << endl;
            adminMenu();
            return;
        } else {
            attempts++;
            cout << "Incorrect Password." << endl;
        }
    }
    cout << endl
```

```
<< "*** ACCESS DENIED *** Maximum login attempts failed. Returning to Main  
Menu."  
    << endl;  
}  
  
void userMenu() {  
    int userChoice;  
    do {  
        cout << endl << "--- USER SERVICES MENU ---" << endl;  
        cout << "1. Check Status" << endl;  
        cout << "2. Submit Request" << endl;  
        cout << "3. Return to Main Menu" << endl;  
        cout << "Enter service choice: ";  
        cin >> userChoice;  
  
        switch (userChoice) {  
            case 1:  
                cout << "[User Task] Your request is pending approval." << endl;  
                break;  
            case 2:  
                cout << "[User Task] Your request has been submitted." << endl;  
                break;  
            case 3:  
                cout << endl << "Returning to the Main Menu." << endl;  
                break;  
            default:  
                cout << endl << "Invalid service choice. Try again." << endl;  
                break;  
        }  
    } while (userChoice != 3);  
}  
  
void userPanel() {  
    cout << endl << "--- Welcome, User! ---" << endl;  
    userMenu();  
}
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The screenshot shows a terminal window titled "C:\Users\Huzaifa Altaf Abbasi" running on TDM-GCC 4.9. The window displays a menu system for a program. The menu includes options for Admin Panel, User Panel, and Exit Program. The user selects the Admin Panel option, leading to an Admin Tasks menu with options for View Database, Change Settings, and Return to Main Menu. The user selects Change Settings, which is confirmed as completed. Finally, the user exits back to the Main Program Menu.

```
1. Admin Panel
2. User Panel
3. Exit Program
Enter choice: 1

--- ADMIN LOGIN REQUIRED ---
Enter Password (Attempt 1 of 3): admin897

Password Correct! Access Granted.

--- ADMIN TASKS MENU ---
1. View Database
2. Change Settings
3. Return to Main Menu
Enter task choice: 2
Settings have been changed.

--- ADMIN TASKS MENU ---
1. View Database
2. Change Settings
3. Return to Main Menu
Enter task choice: 3

task complete.

MAIN PROGRAM MENU
1. Admin Panel
2. User Panel
3. Exit Program
```