

```
#include <iostream>
#include <string>

using namespace std;

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

void adminPanel();
void userPanel();

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();
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        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;
```

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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();
```

}

```
EX E:\programming fundamentals\73423_ishaqkhan_khan_Task_7\x64\Debug\73423_ishaqkhan_khan_Task_7.exe
MAIN PROGRAM MENU
1. Admin Panel
2. User Panel
3. Exit Program
Enter choice: 1

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

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: 1
Displaying secret database info

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