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```
main.cpp X
1  #include <iostream>
2  #include <fstream>
3  #include <string>
4  using namespace std;
5
6  void registerUser() {
7      string username, password;
8
9      cout << "Enter username: ";
10     cin >> username;
11
12     cout << "Enter password: ";
13     cin >> password;
14
15     ifstream readfile("users.txt");
16     string fileUser, filePass;
17     bool userExists = false;
18
19     while (readfile >> fileUser >> filePass) {
20         if (fileUser == username) {
21             userExists = true;
22             break;
23         }
24     }
25     readfile.close();
26
27     if (userExists) {
28         cout << "Error: Username already exists. Please try a different username." << endl;
29         return;
30     }
31 }
```

```
main.cpp X
28     cout << "Error: Username already exists. Please try a different username." << endl;
29     return;
30 }
31
32 ofstream writefile("users.txt", ios::app);
33 writefile << username << " " << password << endl;
34 writefile.close();
35
36 cout << "Registration successful!" << endl;
37 }
38
39 void loginUser() {
40     string username, password;
41
42     cout << "Enter username: ";
43     cin >> username;
44
45     cout << "Enter password: ";
46     cin >> password;
47
48     ifstream readfile("users.txt");
49     string fileUser, filePass;
50     bool loginSuccess = false;
51
52     while (readfile >> fileUser >> filePass) {
53         if (fileUser == username && filePass == password) {
54             loginSuccess = true;
55             break;
56         }
57     }
58     readfile.close();
59 }
```

```

readFile.Close();

if (loginSuccess) {
    cout << "Login successful! Welcome, " << username << "!" << endl;
} else {
    cout << "Error: Incorrect username or password." << endl;
}

main() {
    int choice;

    while (true) {
        cout << "\n--- User System ---" << endl;
        cout << "1. Register" << endl;
        cout << "2. Login" << endl;
        cout << "3. Exit" << endl;
        cout << "Enter your choice: ";
        cin >> choice;

        if (choice == 1) {
            registerUser();
        } else if (choice == 2) {
            loginUser();
        } else if (choice == 3) {
            cout << "Exiting program. Goodbye!" << endl;
            break;
        } else {
            cout << "Invalid choice. Please try again." << endl;
        }
    }
}

```

The screenshot shows a C++ IDE with a project named "task 1" and a source file "main.cpp". The console window displays the following output:

```

--- User System ---
1. Register
2. Login
3. Exit
Enter your choice: 1
Enter username: shahd allam
Enter password: Registration successful!

--- User System ---
1. Register
2. Login
3. Exit
Enter your choice: 2
Enter username: shahd allam
Enter password: Login successful! Welcome, shahd!

--- User System ---
1. Register
2. Login
3. Exit
Enter your choice: 3
Exiting program. Goodbye!

Process returned 0 (0x0)   execution time : 104.147 s
Press any key to continue.

```

The IDE interface includes a file explorer on the left, a toolbar at the top, and a status bar at the bottom. The code editor shows the end of the program with the following lines:

```

90     return 0;
91 }

```