

Implement password-based authentication

1. Write a C Program to authenticate a user using a username and password. Have a list of 5 usernames and passwords in an array. If the entered username and password match with the username/password combination in the array, then print as “Authentication Successful” else print “Authentication failed, try again”. The user is permitted to enter the wrong password only 3 times. If the user exceeds the limit, then print “Limit exceeded.”
2. Do the same first program by reading from a password.txt file. Assume the password.txt file contains the list of 5 usernames and passwords.
3. Do the same first program by reading from a password.txt file. This time instead of directly storing the password corresponding to the username, you need to store the hash (take any hash algo of your choice) of the password and compare the hashes during authentication.