

ASSIGNMENT - 2

Assignment Date	22 September 2022
Student Name	SENTHILVEL
Student Roll Number	9952258137
Maximum Marks	2 Marks

QUESTION:

1. Create User table with user with email, username, roll number, password.
2. Perform UPDATE, DELETE Queries with user table.
3. Connect python code to db2.
4. Create a flask app with registration page, login page and welcome page. By default, load the registration page once the user enters all the fields store the data in database and navigate to login page authenticate user username and password. If the user is valid show the welcome page.

1. CREATE USER TABLE WITH USER WITH EMAIL, USERNAME, ROLL NUMBER, PASSWORD.

The screenshot shows the IBM Db2 on Cloud web interface. The 'Tables' tab is selected, and the 'USER' table is listed under the 'RVK13400' schema. The 'Table definition' panel on the right shows the table structure:

Name	Data type	Nullable	Length	Scale
ROLLNUMBER	INTEGER	Y		0
USERNAME	CHAR	Y	32	0
EMAIL	CHAR	Y	64	0
PASSWORD	VARCHAR	Y	32	0

Below the table definition, there is a 'View data' button. The left sidebar shows the 'Tables' tab selected, and the 'Find schemas or tables' search bar is visible.

The screenshot shows the IBM Db2 on Cloud web interface. The 'Tables' tab is selected, and the 'RVK13400.USER' table is selected. The table structure is displayed, and the message 'There is no data here yet' is shown. The 'Back' button is visible in the top right corner.

ROLLNUMBER	USERNAME	EMAIL	PASSWORD
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File Edit View History Bookmarks Tools Help

IBM Db2 on Cloud

https://bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/cm/3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-sou

IBM Db2 on Cloud

Data objects Saved objects

Filter objects

RVK13400

*Untitled - 1

Syntax assistant

Run all

History

Find history

Script	Date	Status	Runtime
Untitled - 1	Nov 1, 2022 3:01:19 PM	2	0.009 s
INSERT INTO USER VALUES (1,'Nandhitha Sree' , 'nandhithasreeb@gmail.com' , 'sree24@');			0.005 s
INSERT INTO USER VALUES (2,'Jeon Jimin' , 'jikook@gmail.com' , 'jikook@');			0.004 s

File Edit View History Bookmarks Tools Help

IBM Db2 on Cloud

https://bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/cm/3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-sou

IBM Db2 on Cloud

Load Data Load History Tables Views Indexes Aliases MQTs Sequences Application objects

RVK13400.USER

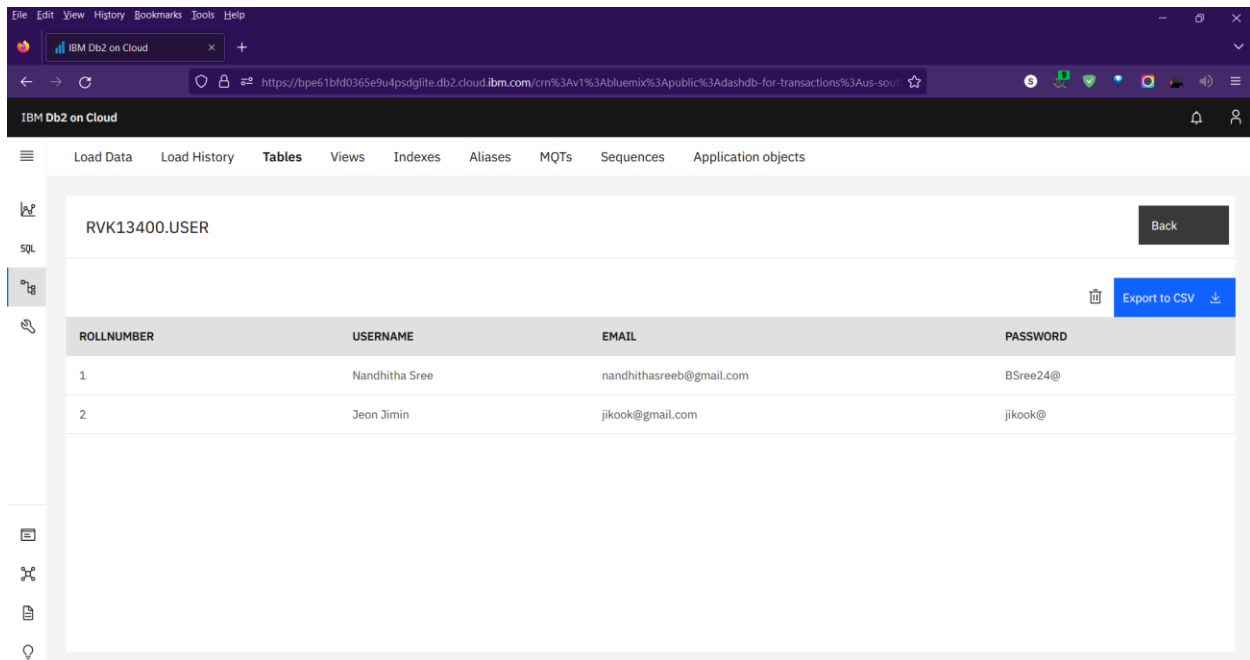
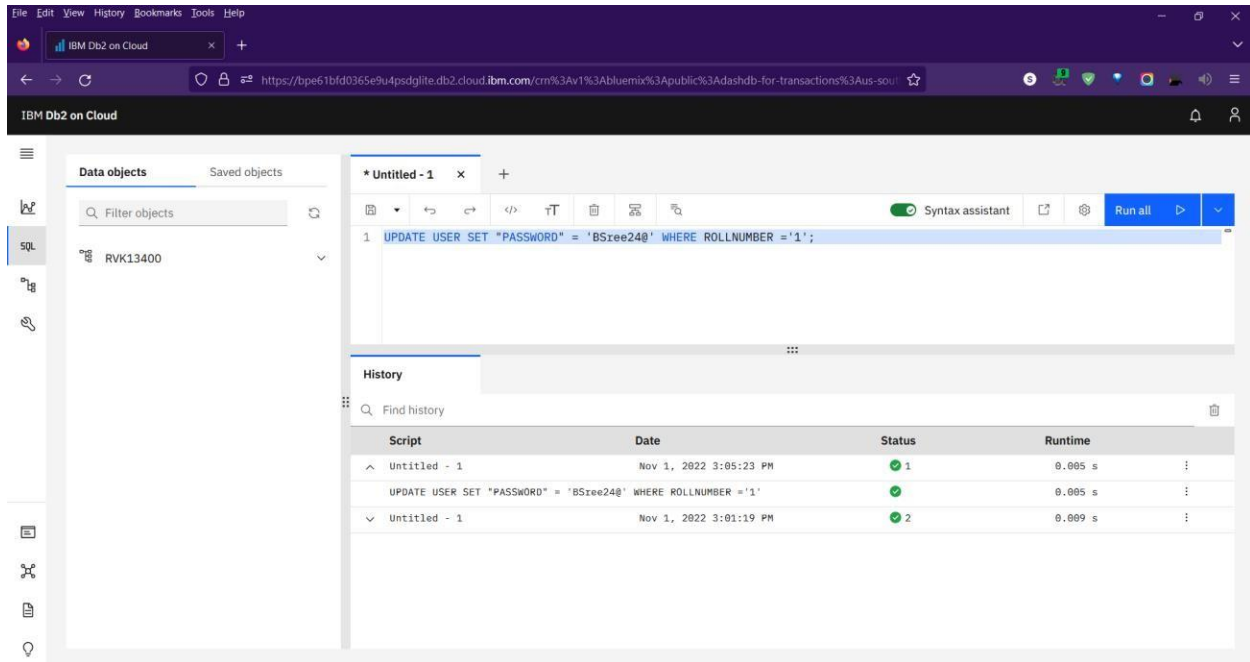
Back

Export to CSV

ROLLNUMBER	USERNAME	EMAIL	PASSWORD
1	Nandhitha Sree	nandhithasreeb@gmail.com	sree24@
2	Jeon Jimin	jikook@gmail.com	jikook@

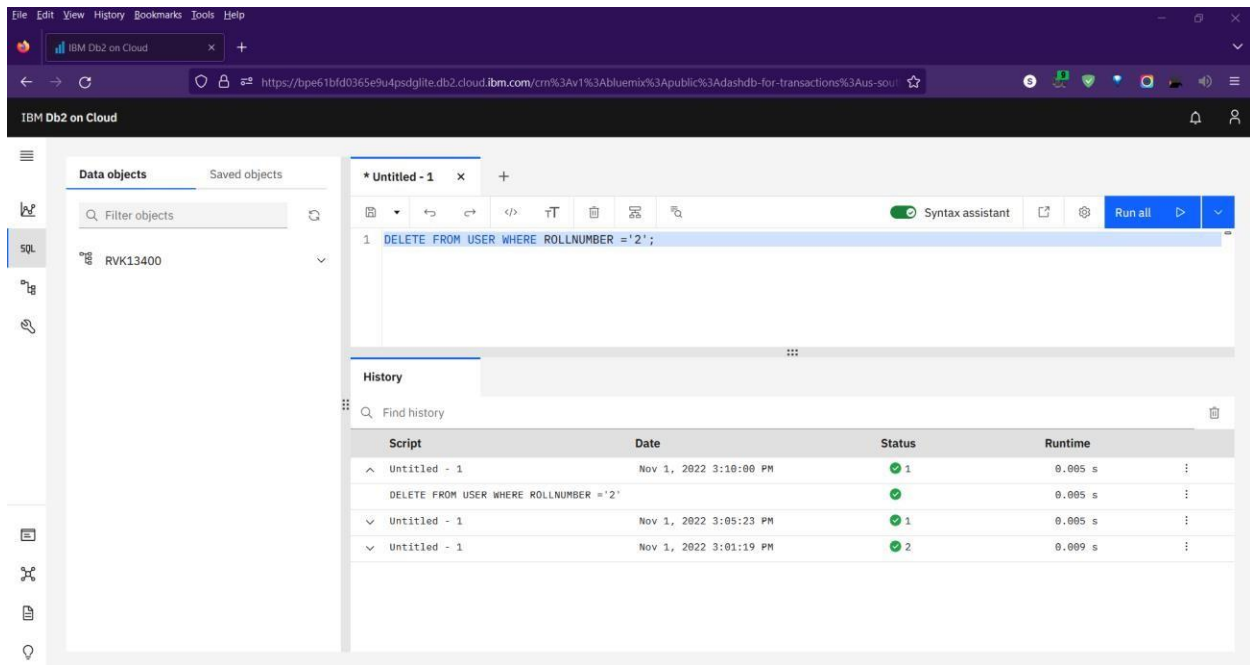
2. PERFORM UPDATE, DELETE QUERIES WITH USER TABLE.

UPDATE TABLE:



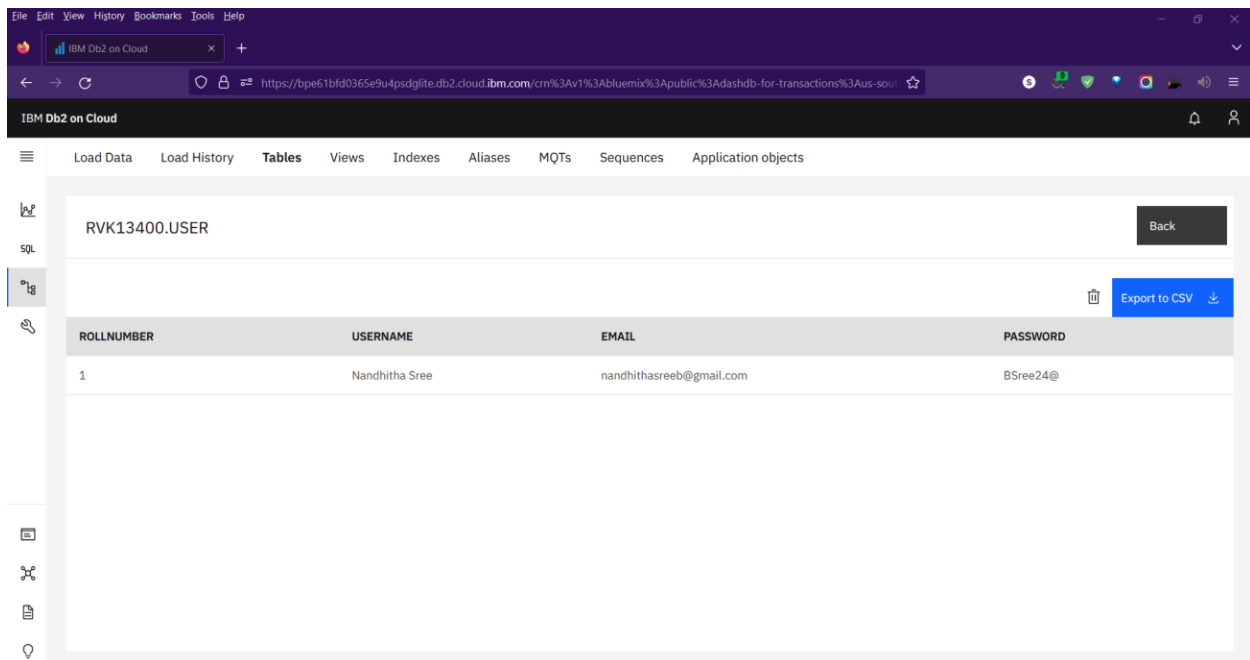
Thus, for ROLL NUMBER 1 the PASSWORD has been updated from "Sree24@" to "BSree24@".

DELETE TABLE:



The screenshot shows the IBM Db2 on Cloud SQL editor interface. The main editor area contains a single SQL statement: `DELETE FROM USER WHERE ROLLNUMBER = '2';`. The interface includes a sidebar with a tree view showing the database structure, including a table named `RVK13400`. Below the editor, a "History" tab is active, displaying a table of execution logs.

Script	Date	Status	Runtime
Untitled - 1	Nov 1, 2022 3:10:00 PM	✓ 1	0.005 s
DELETE FROM USER WHERE ROLLNUMBER = '2'		✓	0.005 s
Untitled - 1	Nov 1, 2022 3:05:23 PM	✓ 1	0.005 s
Untitled - 1	Nov 1, 2022 3:01:19 PM	✓ 2	0.009 s



The screenshot shows the IBM Db2 on Cloud SQL editor interface with the "Tables" tab selected. The table `RVK13400.USER` is displayed, showing its structure and data. The table has four columns: `ROLLNUMBER`, `USERNAME`, `EMAIL`, and `PASSWORD`. The data row shows a single record with `ROLLNUMBER` 1, `USERNAME` Nanditha Sree, `EMAIL` nandithasreeb@gmail.com, and `PASSWORD` BSree24@.

ROLLNUMBER	USERNAME	EMAIL	PASSWORD
1	Nanditha Sree	nandithasreeb@gmail.com	BSree24@

Thus, **ROLLNUMBER 2** has been deleted.

3. CONNECT PYTHON CODE TO DB2.

* NOTE:- Question 4 Contains Question 3 Answer

4. CREATE A FLASK APP WITH REGISTRATION PAGE, LOGIN PAGE AND WELCOME PAGE. BY DEFAULT, LOAD THE REGISTRATION PAGE ONCE THE USER ENTERS ALL THE FIELDS STORE THE DATA IN DATABASE AND NAVIGATE TO LOGIN PAGE AUTHENTICATE USER USERNAME & PASSWORD. IF THE USER IS VALID SHOW THE WELCOME PAGE.

App.py

```
1 from flask import Flask, render_template, request, redirect, url_for
2 import ibm_db
3
4 dsn_hostname = "61bc1829-6f45-4cd4-bef4-10cf081900bf.clogj3d0tyu0lqde00.databases.appdomain.cloud"
5 dsn_uid = "b9931478" # e.g. "abc12345"
6 dsn_pwd = "2X9Yhbb02u0sRqL" # e.g. "7dZ3hdt9X065o0"
7 dsn_driver = "IBMDB2CLI"
8 dsn_database = "bludb" # e.g. "BLUDB"
9 dsn_port = "32304" # e.g. "32733"
10 dsn_protocol = "TCPIP" # i.e. "TCPIP"
11 dsn_security = "SSL" # i.e. "SSL"
12 dsn_cert = "DigiCertGlobalRootCA.crt"
13 dsn = ("DRIVER={0}";"DATABASE={1}";"HOSTNAME={2}";"PORT={3}";"PROTOCOL={4}";"UID={5}";"PWD={6}";"SECURITY={7}";"SSLServerCertificate={8}";).format(dsn_driver, dsn_database, dsn_hostname, dsn_port, dsn,
14 conn = ibm_db.connect(dsn, "", "")
15 app = Flask(__name__)
16 @app.route("/", methods=['GET', 'POST'])
17 def regpage():
18     if request.method == 'POST':
19         USERNAME = request.form['username']
20         PHONE = request.form['phone']
21         PASSWORD = request.form['password']
22         CPASSWORD = request.form['cpassword']
23         insertQuery = "INSERT INTO USER VALUES ('"+USERNAME+"', '"+PHONE+"', '"+PASSWORD+"', '"+CPASSWORD+"')"
24         insertStat = ibm_db.prepare(conn, insertQuery)
25         ibm_db.execute(insertStat)
26         return redirect(url_for('loginpage'))
27     return render_template("register.html")
28 @app.route("/login", methods=['GET', 'POST'])
29 def loginpage():
30     if request.method == 'POST':
31         phone = request.form['phone']
32         password = request.form['password']
33         query = "select COUNT(*) from user where phone='"+phone+"' and password='"+password+"'"
34         stat5 = ibm_db.exec_immediate(conn, query)
35         row = ibm_db.fetch_tuple(stat5)
36         if (row[0] == 1):
37             return redirect(url_for('home_page'))
38     return render_template("Login.html")
39 def home_page():
40     return render_template("dashboard.html")
41 if __name__ == '__main__':
42     app.run()
```

Register.html

```
1 <head>
2 <meta name="viewport" content="width=device-width, initial-scale=1.0">
3 <link rel="stylesheet" href="/static/style.css">
4 <title>Registration page </title>
5 </head>
6 <body>
7 <div class="container">
8 <div class="title">Registration</div>
9 <div class="content">
10 <form method="post">
11 <div class="user-details">
12 <div class="input-box">
13 <span class="details">Username</span>
14 <input type="text" placeholder="Enter your username" name="username" value="{{request.form['username']}}" required>
15 </div>
16 <div class="input-box">
17 <span class="details">Phone Number</span>
18 <input type="text" placeholder="Enter your number" name="phone" value="{{request.form['phone']}}" required>
19 </div>
20 <div class="input-box">
21 <span class="details">Password</span>
22 <input type="password" placeholder="Enter your password" name="password" value="{{request.form['password']}}" required>
23 </div>
24 <div class="input-box">
25 <span class="details">Confirm Password</span>
26 <input type="password" placeholder="Confirm your password" name="cpassword" value="{{request.form['cpassword']}}" required>
27 </div>
28 </div>
29 <div class="button"><input type="submit" value="Register"></div>
30 </form>
31 </div>
32 </div>
33 </body>
34 </html>
```

Login.html

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta http-equiv="X-UA-Compatible" content="IE=edge">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <link rel="stylesheet" href="/static/style.css">
8   <link rel="stylesheet" href="{{url_for('static',filename='style.css')}}" type="text/css">
9   <title>Login Pages</title>
10 </head>
11 <body>
12   <div class="container">
13     <div class="title">Login</div>
14     <div class="content">
15       <form method="post" action="login">
16         <div class="user-details">
17           <div class="input-box">
18             <span class="details">Phone Number</span>
19             <input type="text" placeholder="Enter your number" name="phone" value="{{request.form['phone']}}" required>
20           </div>
21           <br>
22           <div class="input-box">
23             <span class="details">Password</span>
24             <input type="password" placeholder="Enter your password" name="password" value="{{request.form['password']}}" required>
25           </div>
26         </div>
27         <div class="button">
28           <input type="submit" value="login">
29         </div>
30       </form>
31     </div>
32   </div></body>
33 </html>
```

Style.css

```
1 *{
2   margin: 0;
3   padding: 0;
4   box-sizing: border-box;
5   font-family: 'Poppins', sans-serif;
6 }
7 body{
8   height: 100vh;
9   display: flex;
10  justify-content: center;
11  align-items: center;
12  padding: 10px;
13  background: linear-gradient(135deg, #71b7e6, #9b59b6);
14 }
15 .container{
16   max-width: 700px;
17   width: 100%;
18   background-color: #fff;
19   padding: 25px 30px;
20   border-radius: 5px;
21   box-shadow: 0 5px 10px rgba(0,0,0,0.15);
22 }
23 .container .title{
24   font-size: 25px;
25   font-weight: 500;
26   position: relative;
27 }
28 .container .title::before{
29   content: "";
30   position: absolute;
31   left: 0;
32   bottom: 0;
33   height: 3px;
34   width: 30px;
35   border-radius: 5px;
36   background: linear-gradient(135deg, #71b7e6, #9b59b6);
37 }
```

OUTPUT: -

Registration Page: -

Registration

Username

Phone Number

Password

Confirm Password

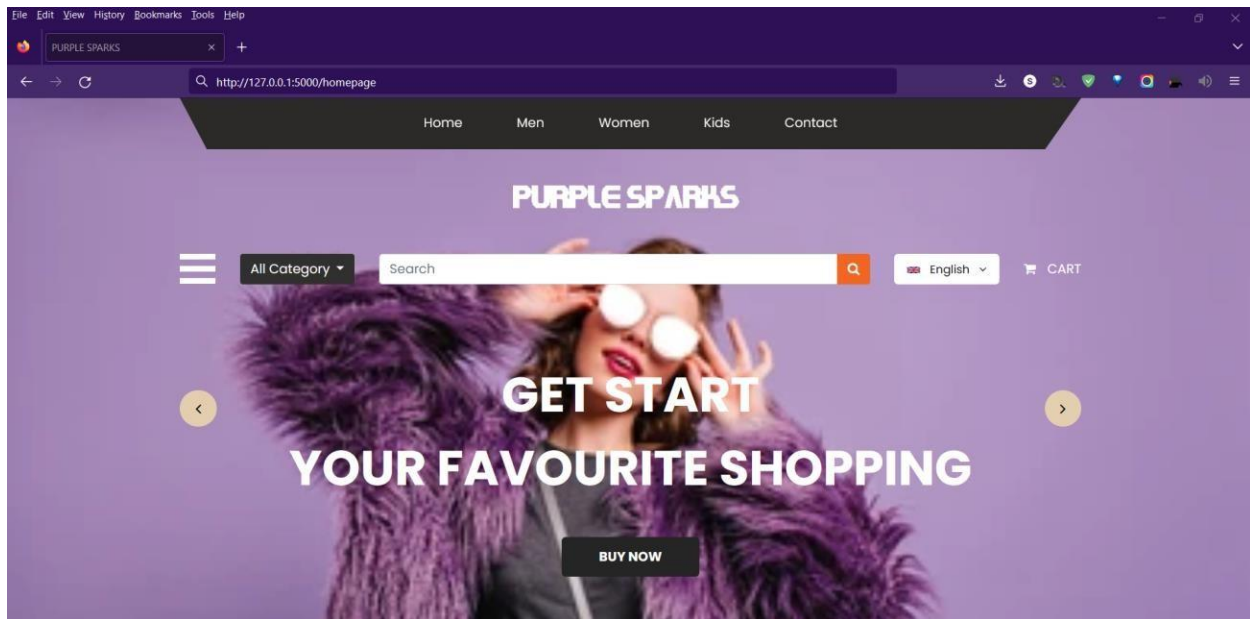
Login Page: -

Login

Phone Number

Password

Welcome Page: -



Database Table: -

A screenshot of the IBM Db2 on Cloud web interface. The browser address bar shows a URL from 'ibm.com'. The interface has a top navigation bar with tabs: 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The 'Tables' tab is selected. On the left, there is a sidebar with icons for 'SQL' and 'Table'. The main area displays a table named 'BPV31478.USER'. Above the table, there is a 'Back' button and an 'Export to CSV' button. The table has four columns: 'USERNAME', 'PHONE', 'PASSWORD', and 'CPASSWORD'. One row of data is visible.

USERNAME	PHONE	PASSWORD	CPASSWORD
Shayu	9894222470	jmjk7	jmjk7