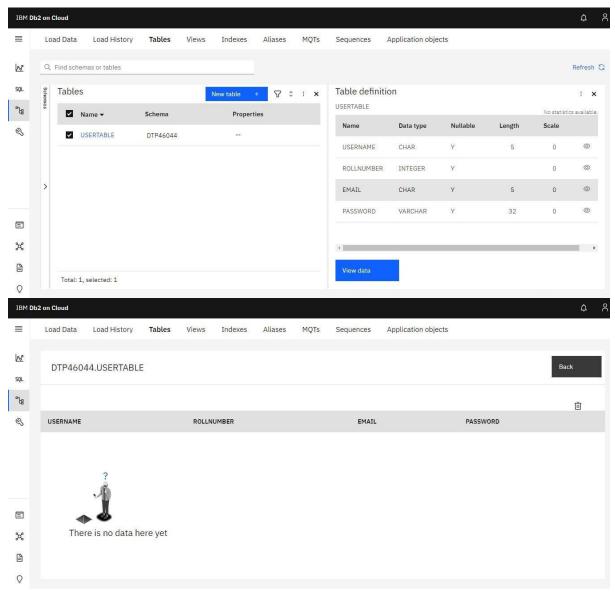
-----Assignment -2 IBM CLOUD DB2

Assignment Date	04 november 2022
Student Name	Sarjin
Student Roll Number	95221903053
Maximum Marks	2 Marks

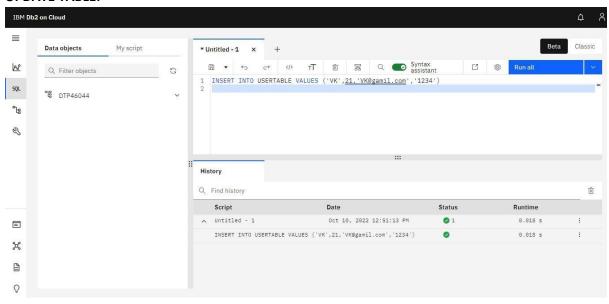
Questions:

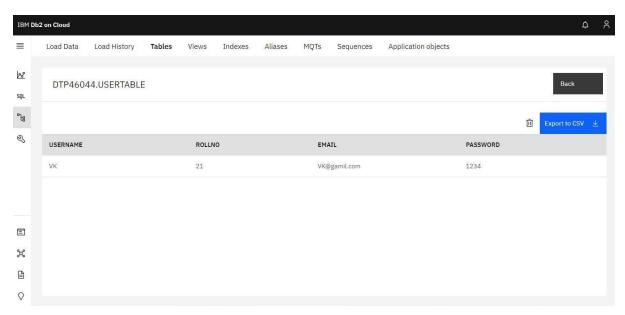
1. Create User table with user with email, username, roll number, password.



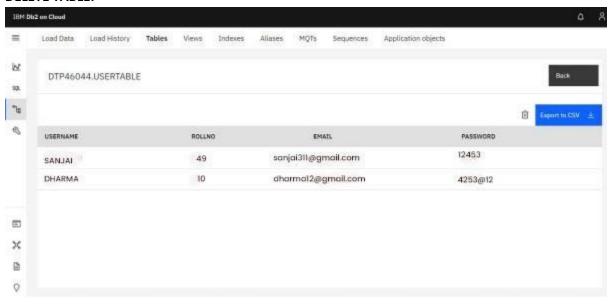
2. Perform UPDATE, DELETE Queries with user table.

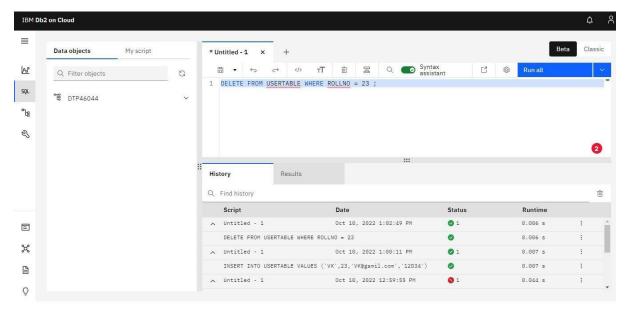
UPDATE TABLE:-





DELETE TABLE:-





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 and password. If the user is valid show the welcome page

Answers

App.py

```
import ibm_db import
re app =
Flask(<u></u>name<u></u>)
app.secret_key = 'a'
conn = ibm db.connect(
    "DATABASE=bludb; HOSTNAME=fbd88901-ebdb-4a4f-a32e-
9822b9fb237b.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32731;USERNA
E=dtp46044;PASSWORD=95soX0sZGhb4ToUj;SECURITY=SSL;SSLSERVERCERTIFICATE=DigiCe
r tGlobalRootCA.crt;", "", "")
@app.route("/", methods=['GET', 'POST'])
def register():
   msg = '' if request.method == 'POST': username =
    request.form['username'] email =
    request.form['email'] password =
    request.form['password'] sql = "SELECT * FROM
    users WHERE username =?" stmt =
    ibm_db.prepare(conn, sql)
    ibm_db.bind_param(stmt, 1, username)
    ibm_db.execute(stmt) account =
    ibm db.fetch assoc(stmt) print(account) if
    account:
            msg = 'Account already exists !'
        elif not re.match(r'[^{\alpha}]+@[^{\alpha}]+\.[^{\alpha}]+', email):
            msg = 'Invalid email address !'
        elif not re.match(r'[A-Za-z0-9]+', username):
            msg = 'name must contain only characters and numbers !'
        else:
            insert sql = "INSERT INTO users VALUES (?, ?, ?)"
            prep stmt = ibm db.prepare(conn, insert sql)
            ibm_db.bind_param(prep_stmt, 1, username)
            ibm_db.bind_param(prep_stmt, 2, email)
            ibm_db.bind_param(prep_stmt, 3, password)
            ibm_db.execute(prep_stmt)
            msg = 'You have successfully registered !'
    elif request.method == 'POST':
        msg = 'Please fill out the form !'
    return render_template('register.html', msg=msg)
@app.route('/login', methods=['GET', 'POST'])
def login(): global userid
```

```
msg = ''
   if request.method == 'POST':
        username = request.form['username'] password =
        request.form['password'] sq1 = "SELECT * FROM users WHERE
       username =? AND password=?" stmt = ibm_db.prepare(conn, sql)
        ibm db.bind param(stmt, 1, username) ibm db.bind param(stmt,
        2, password) ibm_db.execute(stmt) account =
        ibm_db.fetch_assoc(stmt) print(account) if account:
            session['loggedin'] = True session['id']
           = account['USERNAME'] userid =
           account['USERNAME'] session['username'] =
            account['USERNAME'] msg = 'Logged in
            successfully !'
           msg = 'Logged in successfully !' return
            render_template('dashboard.html', msg=msg)
       else:
           msg = 'Incorrect username / password !'
   return render_template('login.html', msg=msg)
if __name__ == '__main__':
   app.run(host='0.0.0.0')
   # app.run(debug=True)
```

Register.html

```
<link rel="stylesheet"</pre>
href="https://cdnjs.cloudflare.com/ajax/libs/fontawesome/4.7.0/css/font-
awesome.css">
    <!-- css stylesheet -->
    <link rel="stylesheet" href="/static/css/style.css">
    <!-- font styles cdn -->
    <link rel="preconnect" href="https://fonts.gstatic.com">
    k
href="https://fonts.googleapis.com/css2?family=Alegreya&display=swap"
rel="stylesheet">
    k
href="https://fonts.googleapis.com/css2?family=Alegreya:wght@600&display=swap
 rel="stylesheet"> </head>
<body>
    <!-- bootstrap navbar -->
    <!-- Login form -->
    <div class="login text-center mt-5">
        <form action="/" method="post">
            <h2 class="form-text-h2"> Register Form </h2>
            <div class="msg">{{ msg }}</div>
            <input type="text" class="form-control" name="username"</pre>
placeholder="Enter Your Username" id="username"
                required>
            <input type="email" class="form-control" name="email"</pre>
placeholder="Enter Your Email ID" id="email" required>
            <input type="password" class="form-control" name="password"</pre>
placeholder="Enter Your Password" id="password"
                required>
            <button type="submit" id="button" class="btn btn-primary">
Register </button>
            <div class="note mt-3 text-center">
                <!--Register form -->
                 already have an account ? please login <a</p>
href="/login">login! </a> 
            </div>
        </form>
    </div>
</body>
</html>
```

Login.html

```
<!DOCTYPE html>
<html Lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Smart Fashion Login</title>
    <!-- favicon -->
    <!-- <li>k rel="shortcut icon" href="/assets/img/favicon.ico"
type="image/x-icon"> -->
    <!-- <link rel="icon" href="/assets/img/favicon.ico" type="image/x-icon">
    <link rel="icon" type="image/png" sizes="16x16" href="/assets/img/favicon-</pre>
32x32.png">
    <link rel="stylesheet"</pre>
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.cs
 integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
crossorigin="anonymous">
    <link rel="stylesheet"</pre>
href="https://cdnjs.cloudflare.com/ajax/libs/fontawesome/4.7.0/css/font-
awesome.css">
    <!-- css stylesheet -->
    <link rel="stylesheet" href="/static/css/style2.css">
    <!-- font styles cdn -->
    <link rel="preconnect" href="https://fonts.gstatic.com">
href="https://fonts.googleapis.com/css2?family=Alegreya&display=swap"
rel="stylesheet">
    k
href="https://fonts.googleapis.com/css2?family=Alegreya:wght@600&display=swap
' rel="stylesheet"> </head>
<body>
    <div class="login text-center mt-5">
        <form action="/login" method="post">
            <h2 class="form-text-h2"> Login Form </h2>
            <div class="msg">{{ msg }}</div>
            <div class="form-group mb-3">
                <label class="label" for="username">Username</label>
                <input type="text" class="form-control" placeholder="Username"</pre>
name="username" required>
```

```
<div class="form-group mb-3">
                <label class="label" for="password">Password</label>
                <input type="password" class="form-control"</pre>
placeholder="Password" name="password" required>
            </div>
            <button type="submit" id="button" class="btn btn-primary"> Login
</button>
            <div class="note mt-3 text-center">
                <!--Register form -->
                > Don't have an account yet? Click here to <a
href="/">register! </a> 
            </div>
        </form>
    </div>
</body>
</html>
```

Style.css

```
# {
    margin: 0;
    padding: 0;
}

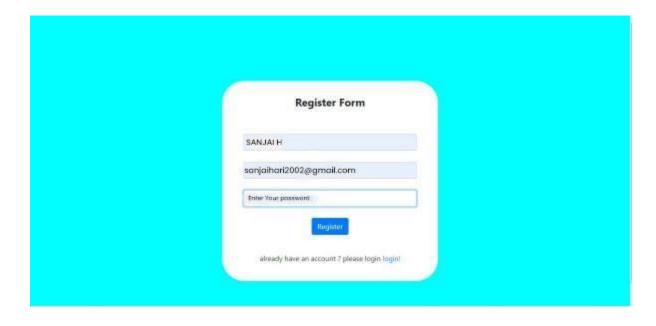
body { background-color: aqua
    !important; display: flex; flex-
    direction: column; align-items:
    center; justify-content: center;
}

form { display: flex; flex-
    direction: column;
    align-items: center;
    justify-content: center;
    background-color: white;
    width: 40%; height:
    450px; border-radius:
    50px; margin: 100px;
    gap: 25px;
}
```

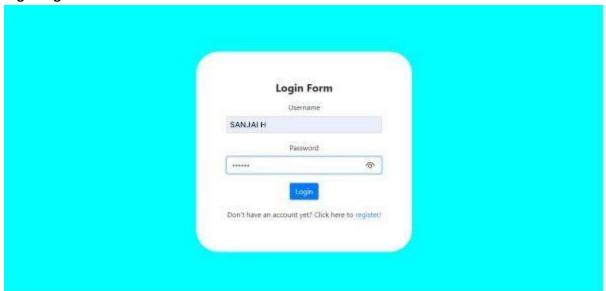
```
h2 {
    font-size: large; font-
   weight: bolder;
input { width: 80%
   !important;
div { display: flex; align-
items: center; justify-
content: center; flex-
direction: column; width:
90%; }
.form-text-vk { font-
   size: small; padding-
   bottom: 10px;
.form-text-h2 { font-
    size: x-large;
    padding-top: 10px;
```

Output:registration

page:-



Login Page:-



Welcome Page:-



Data Base Table :-

