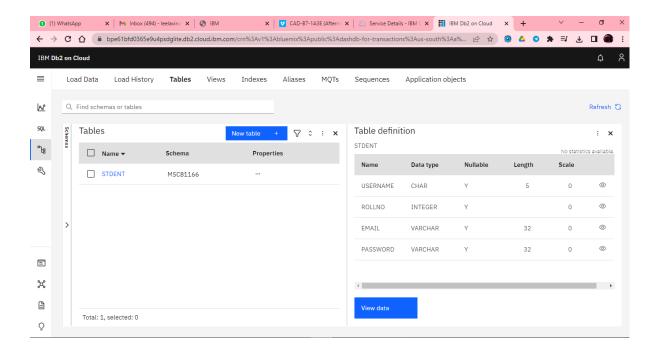
Assignment -2 IBM CLOUD DB2

| Assignment Date | 29 September 2022 |
|---------------------|-------------------|
| Student Name | HARIVANISRI G |
| Student Roll Number | 951919CS030 |
| Maximum Marks | 2 Marks |

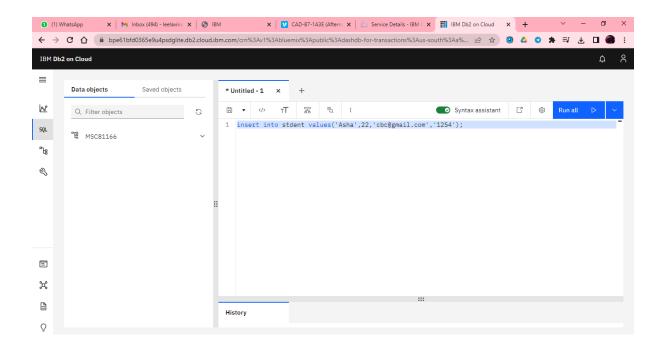
Questions:

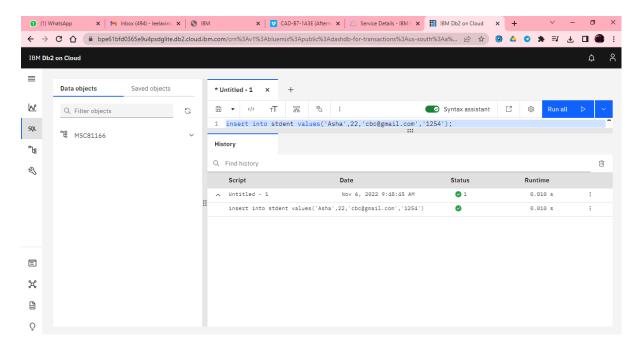
1. Create User table with user with email, username, roll number, password.

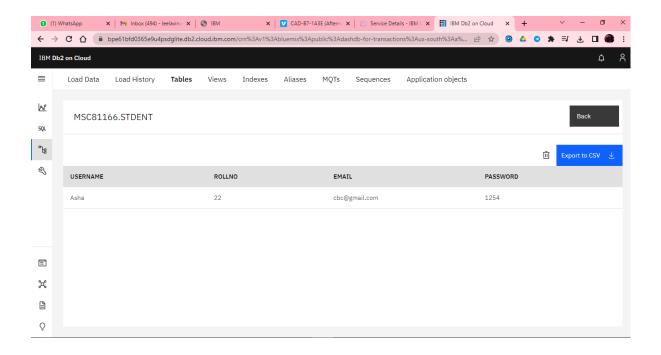


2. Perform UPDATE, DELETE Queries with user table.

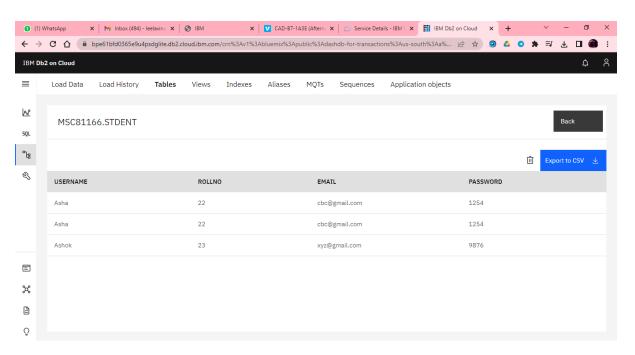
UPDATE TABLE:-

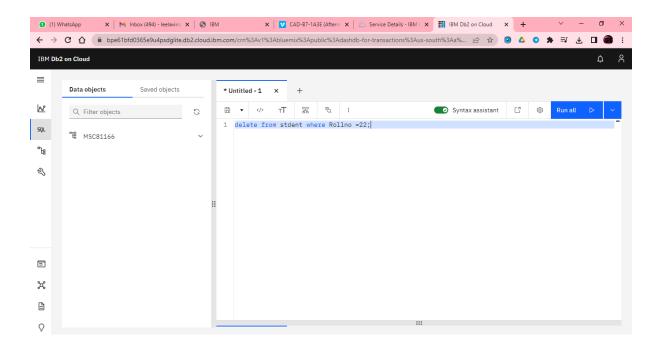


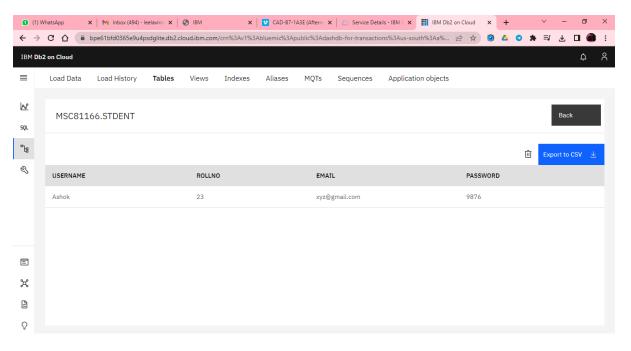




DELETE TABLE:-







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

```
from flask import Flask, render_template, request, redirect, url_for, session
import ibm db
import re
app = Flask(__name___)
app.secret key = 'a'
conn = ibm_db.connect(
    "DATABASE=bludb; HOSTNAME=fbd88901-ebdb-4a4f-a32e-
9822b9fb237b.clogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32731;USERNAM
E=dtp46044;PASSWORD=95soX0sZGhb4ToUj;SECURITY=SSL;SSLSERVERCERTIFICATE=DigiCer
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']
        sql = "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

```
<!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 register</title>
         <!-- bootstrap css cdn -->
         <link rel="stylesheet"</pre>
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">href="https://stackpath.bootstrapcdn.com/bootstrapcdn.com/bootstrap.min.css">href="https://stackpath.bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/boots
                  integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
crossorigin="anonymous">
         <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-</pre>
awesome/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">
href="https://fonts.googleapis.com/css2?family=Alegreya&display=swap"
rel="stylesheet">
         link
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"
                                    reauired>
                           <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>
```

Login.html

```
<!DOCTYPE html>
<html <pre>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 -->
           <!-- <link rel="shortcut icon" href="/assets/img/favicon.ico"
type="image/x-icon"> -->
          <!-- <li>k 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">
           <!-- bootstrap css cdn -->
           <link rel="stylesheet"</pre>
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">href="https://stackpath.bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.com/bootstrapcdn.c
                      integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
crossorigin="anonymous">
           <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-</pre>
awesome/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">
           k
href="https://fonts.googleapis.com/css2?family=Alegreya&display=swap"
rel="stylesheet">
           link
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>
            <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</p>
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:-

