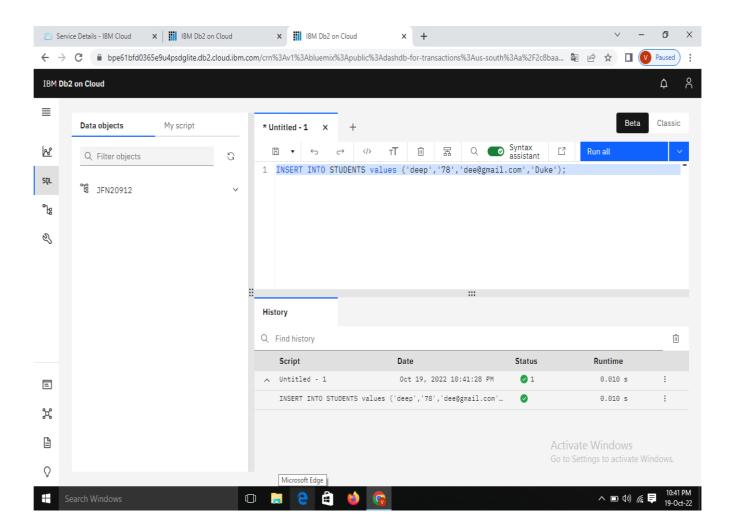
Assignment - 2 IBM CLOUD DB2

Assignment Date	29 September 2022
Student Name	DEEPIKA N
Student Roll Number	613019104013
Maximum Marks	2 Marks

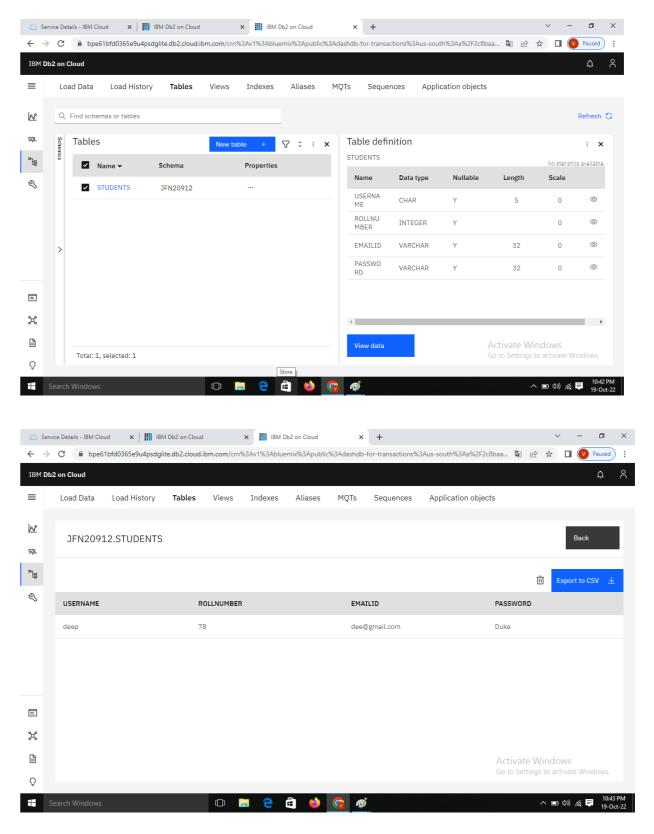
Questions:

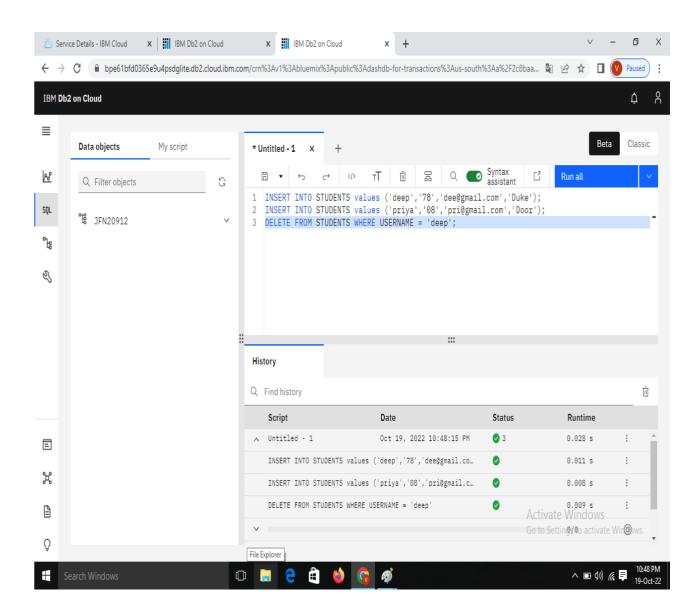
1. Create User table with user with email, username, roll number, password.



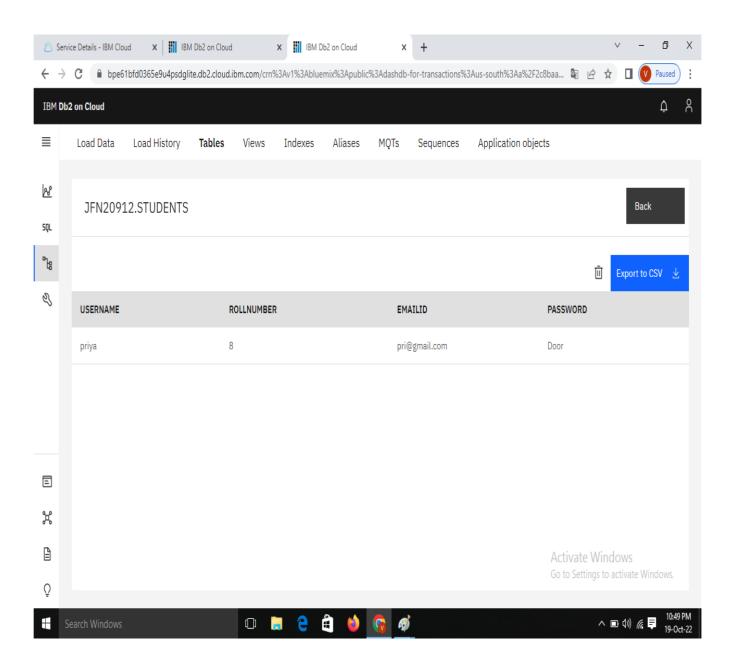
2. Perform UPDATE, DELETE Queries with user table.

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=Db2New;HOSTNAME=19af6446-6171-4641-8aba-
9dcff8e1b6ff.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=30699;USERNAM
E=kgb92696;PASSWORD=3||WyGYU3bM||vwnX;SECUR||TY=SSL;SSLSERVERCERT||F||CATE=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'[^@]+@[^@]+\.[^@]+', 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)
```

```
<html lang="en">
<head>
   <meta charse t="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Containment Zone Alerting register</title>
    <!-- bootstrap css cdn -->
    k rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css
        integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
crossorigin="anonymous">
    k re/="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.css">
    <!-- css stylesheet -->
    k rel="stylesheet" href="style.css">
    <!-- font styles cdn -->
    k rel="preconnect" href="https://fonts.gstatic.com">
    link
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 -->
    <!-- navbar ends -->
   <!-- Login form -->
    <div c/ass="login text-center mt-5">
        <form action="/" method="post">
            <h2 class="form-text-h2"> Register Form </h2>
            <div c/ass="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"
            <button type="submit" id="button" class="btn btn-primary">
Register </button>
```

```
<div c/ass="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 charse t="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Containment Zone Alerting Login</title>
    <!-- fav icon -->
    <!-- </li>
-- 
ink re /= "shortcut icon" hre f="/assets/img/favicon.ico"

type="image/x-icon"> -->
    <!-- </ink re |="icon" href="/assets/img/favicon.ico" type="image/x-icon">
    re/="icon" type="image/png" sizes="16x16" href="/assets/img/favicon-
32x32.png">
   <!-- bootstrap css cdn -->
    k rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css
        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 sty/esheet -->
    k rel="stylesheet" href="style.css">
    <!-- font styles cdn -->
    k rel="preconnect" href="https://fonts.gstatic.com">
    link
href="https://fonts.googleapis.com/css2?family=Alegreya&display=swap"
rel="stylesheet">
```

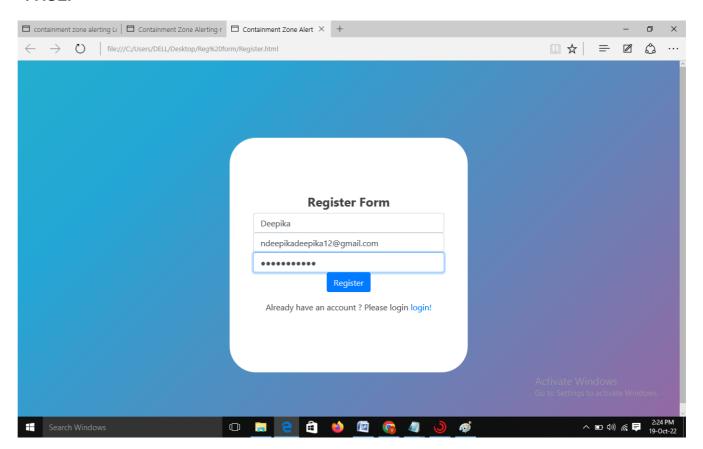
```
link
href="https://fonts.googleapis.com/css2?family=Alegreya:wght@600&display=swap"
rel="stylesheet">
</head>
<body>
    <div c/ass="login text-center mt-5">
        <form action="/login" method="post">
            <h2 class="form-text-h2"> Login Form </h2>
            <div c/ass="msg">{{ msg }}</div>
            <div c/ass="form-group mb-3">
                <labe | class="label" for="username">Username</label>
                <input type="text" class="form-control" placeholder="Username"</pre>
name="username" required>
            </div>
            <div c/ass="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 c/ass="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 {
    color: #444444:
    background:linear-gradient(-45deg, #EE7752, #E73C7E, #23A6D5, #23D5AB);
    background-size: 400% 400%;
    position: relative;
    display: flex;
```

flex-direction: column;

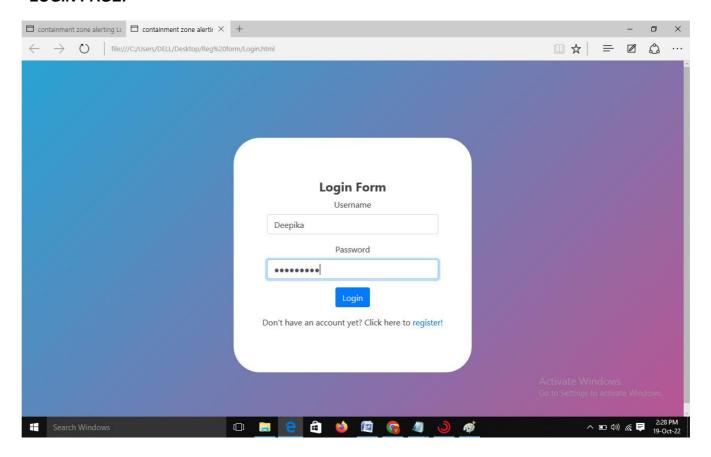
```
align-items: center;
   justify-content: center;
   animation: anime 10s ease-in-out infinite;
@keyframes anime{
 0%{
        background-position: 0 50%;
 50%{
        background-position: 100% 50%;
 100%{
        background-position: 0 50%;
 }
form {
   display: flex;
   flex-direction: column;
    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:-

