

## Assignment -2

### IBM CLOUD DB2

Assignment Date	29 September 2022
Student Name	VIMALA M
Student Roll Number	613019106074
Maximum Marks	2 Marks

#### Questions:

- Create a User table with the user with email, username, roll number, and password.

The screenshot displays the IBM Db2 on Cloud web interface. The top navigation bar includes options like 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The main content area is divided into two panels. The left panel, titled 'Tables', shows a list of tables with columns 'Name', 'Schema', and 'Properties'. A table named 'STUDENT' is listed under the 'THP98382' schema. The right panel, titled 'Table definition', shows the structure of the 'STUDENT' table. It includes a header row with columns 'Name', 'Data type', 'Nullable', 'Length', and 'Scale'. The table definition is as follows:

Name	Data type	Nullable	Length	Scale
USERNAME	CHAR	Y	5	0
ROLL NUMBER	INTEGER	Y		0
EMAIL ID	VARCHAR	Y	32	0
PASSWORD	VARCHAR	Y	32	0

At the bottom of the right panel, there is a 'View data' button. The status bar at the bottom of the interface shows the temperature as 22°C, the weather as 'Partly cloudy', and the time as 22:53 on 26-10-2022.

- Perform UPDATE, and DELETE Queries with the user table.

## UPDATE TABLE :-

The screenshot displays the IBM Db2 on Cloud web interface. The browser address bar shows the URL: `bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/cm93Av193Abluemix93Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2Fd265ecbf9fb745699c2dc0c41f1e5dfa%3A49b84b72...`. The interface includes a left sidebar with navigation icons, a central editor area, and a bottom status bar.

**Data objects**

Filter objects

THP98382

**\*Untitled - 1**

Syntax assistant

Run all

1 `INSERT INTO STUDENT values ('vim','74','vim2090@gmail.com','vim@');`

**History**

Find history

Script	Date	Status	Runtime
Untitled - 1	Oct 26, 2022 10:55:46 PM	✓ 1	0.006 s
INSERT INTO STUDENT values ('vim','74','vim2090@gmail.com','vim@')		✓	0.006 s

22°C Partly cloudy

ENG IN

22:55 26-10-2022

THP98382.STUDENT

USERNAME	ROLL NUMBER	EMAIL ID	PASSWORD
vim	74	vim2000@gmail.com	vim@

Export to CSV

## DELETE TABLE :-

THP98382

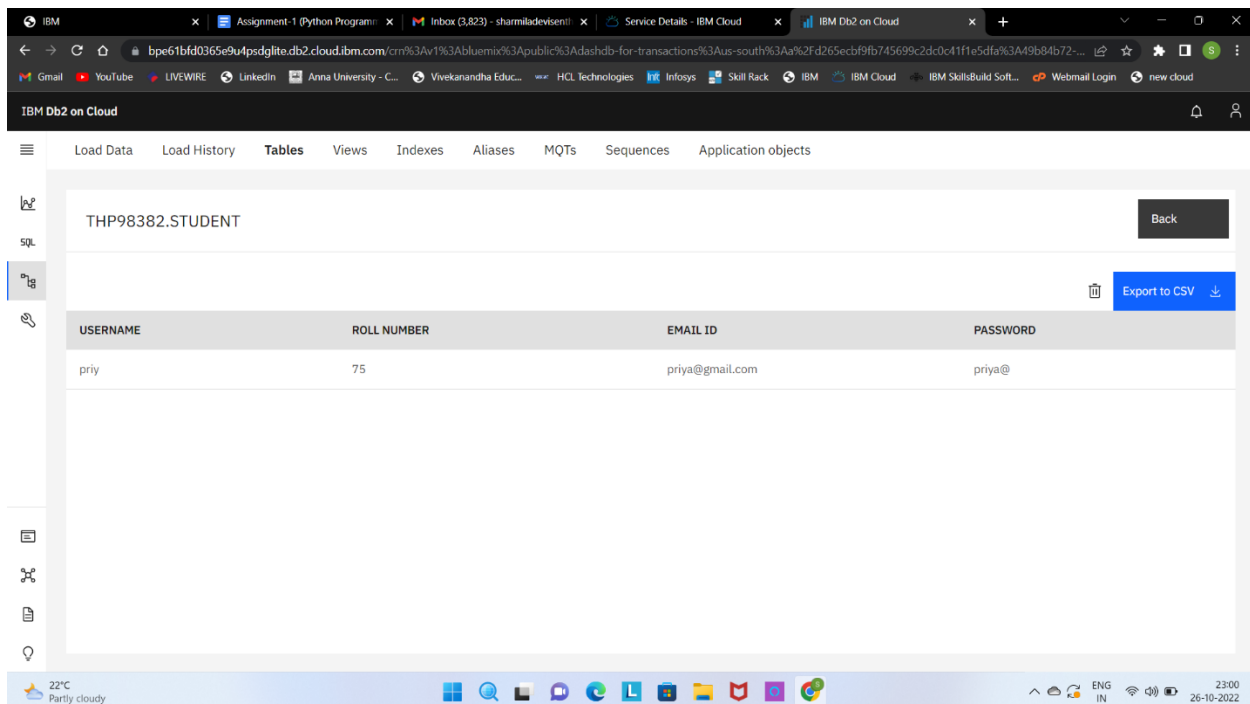
```

1 INSERT INTO STUDENT values ('vim','74','vim2000@gmail.com','vim@');
2 INSERT INTO STUDENT values ('priy','75','priya@gmail.com','priya@');
3 DELETE FROM STUDENT WHERE USERNAME = 'vim';

```

History

Script	Date	Status	Runtime
Untitled - 1	Oct 26, 2022 11:00:00 PM	3	0.015 s
INSERT INTO STUDENT values ('vim','74','vim2000@gmail.com','vim@')			0.004 s
INSERT INTO STUDENT values ('priy','75','priya@gmail.com','priya@')			0.005 s
DELETE FROM STUDENT WHERE USERNAME = 'vim'			0.006 s
Untitled - 1	Oct 26, 2022 10:55:46 PM	1	0.006 s



### 3. CONNECT PYTHON CODE TO DB2.

**NOTE :-** Question 4 contains Question 3 answer

4. Create a flask app with a registration page, login page and welcome page. By default load the registration page once the user enters all the fields store the data in the database and navigate to the login page to authenticate user's 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=3IlWyGYU3bMIvwnX;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'^[^\@]+\.[^\@]+$', 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(prepare_stmt, 1, username)
            ibm_db.bind_param(prepare_stmt, 2, email)
            ibm_db.bind_param(prepare_stmt, 3, password)
            ibm_db.execute(prepare_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)
        user = ibm_db.fetch_row(stmt)
        if user:
            userid = user[0]
            return redirect(url_for('index'))
        else:
            msg = 'Invalid username or password !'
    return render_template('login.html', msg=msg)

```

```

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>News Tracker Application</title>

    <!-- bootstrap css cdn -->    <link 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/fontawesome/4.7.0/css/font-
awesome.css">
    <!-- css stylesheet -->
    <link rel="stylesheet" href="Style.css">
    <!-- font styles cdn -->
    <link 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>
    <!-- bootstrap navbar -->
    <!-- navbar ends -->
    <!-- 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"
placeholder="Enter Your Username" id="username"
required>
            <input type="email" class="form-control" name="email"
placeholder="Enter Your Email ID" id="email" required>
            <input type="password" class="form-control" name="password"
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 -->
                <p> already have an account ? please login <a
href="/login">login! </a> </p>

            </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>Plasma Donor Application Login</title>
    <!-- favicon -->

```

```

    <!-- <link 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/favicon32x32.png">
    <!-- bootstrap css cdn -->
<link 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/fontawesome/4.7.0/css/font-
awesome.css">
    <!-- css stylesheet -->
    <link rel="stylesheet" href="style.css">
    <!-- font styles cdn -->
    <link 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 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"
name="username" required>
            </div>
            <div class="form-group mb-3">
                <label class="label" for="password">Password</label>
                <input type="password" class="form-control"
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 -->
        <p> Don't have an account yet? Click here to <a
href="/">register! </a> </p>
    </div>
</div>

</body>
</html>

```

### Style.css

```

* {
    margin: 0;
padding: 0;
    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;  
} body  
{  
    color: #444444;      background:linear-gradient(-45deg, #EE7752, #E73C7E,  
#23A6D5, #23D5AB);      background-size: 400% 400%;      position: relative;  
display: flex;      flex-direction: column;
```

```
padding-bottom: 10px;
```

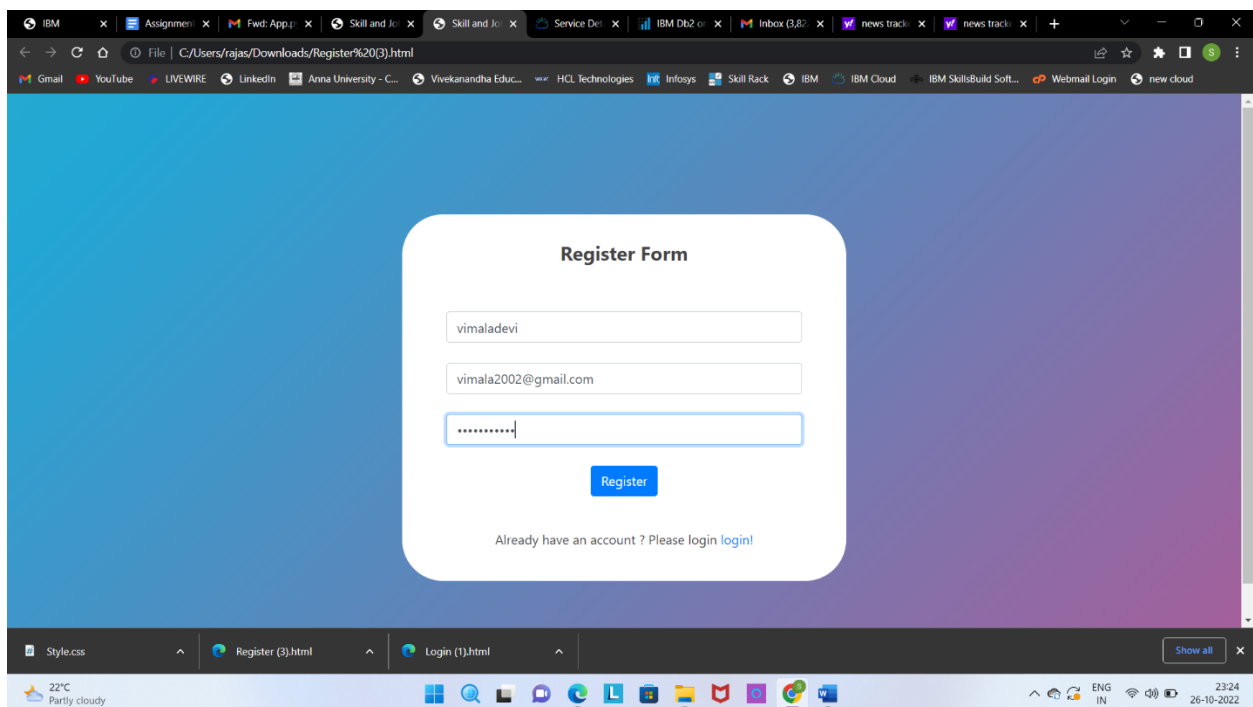
```
}
```

```
.form-text-h2 {      font-size: x-large;      padding-top: 10px;
```

```
}
```

**OUTPUT:-**

**REGISTRATION PAGE:-**



The screenshot displays a web browser window with multiple tabs open. The active tab shows a registration form titled "Register Form" centered on a blue and purple gradient background. The form contains three input fields: the first contains "vimaladevi", the second contains "vimala2002@gmail.com", and the third is a password field with masked characters ".....". Below the fields is a blue "Register" button. At the bottom of the form, there is a link: "Already have an account ? Please login [login!](#)". The browser's address bar shows the file path "C:/Users/rajas/Downloads/Register%20(3).html". The Windows taskbar at the bottom indicates a temperature of 22°C, "Partly cloudy" weather, and the date "26-10-2022".

Register Form

vimaladevi

vimala2002@gmail.com

.....

Register

Already have an account ? Please login [login!](#)

## LOGIN PAGE:-

IBM x Assignment: 1 x Fwd: App.py x Skill and Job P x Service Detail: x IBM Db2 on C x Inbox (3,822) x news tracker x news tracker x

File | C:/Users/rajas/Downloads/Login%20(1).html

Gmail YouTube LIVEWIRE LinkedIn Anna University - C... Vivekanandha Educ... HCL Technologies Infosys Skill Rack IBM IBM Cloud IBM SkillsBuild Soft... Webmail Login new cloud

### Login Form

Username

vimaladevi

Password

\*\*\*\*\*

Login

Don't have an account yet? Click here to [register!](#)

Style.css Register (3).html Login (1).html Show all x

22°C Partly cloudy

23:23 26-10-2022

## WELCOME PAGE:-

