

## Assignment -2

Assignment Date	28 September 2022
Student Name	Ms.Dhivya V
Student Roll Number	820419104019
Maximum Marks	2 Marks

### Question-1:

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

### Solution:

The screenshot shows the IBM Db2 on Cloud console interface. The 'Schemas' tab is active, displaying a list of schemas. The 'BLN00610' schema is selected, and the 'Users' table is visible in the 'Tables' list. The 'Users' table has the following properties:

Name	Schema	Properties
USERS	BLN00610	...

The screenshot shows the IBM Db2 on Cloud console interface. The 'Tables' tab is active, displaying a list of tables. The 'USERS' table is selected, and the 'Table definition' panel is open. The table has the following definition:

Name	Data type	Nullable	Length	Scale
USERNAME	VARCHAR	Y	32	0
EMAIL	VARCHAR	Y	32	0
PASSWORD	VARCHAR	Y	32	0

The screenshot shows the IBM Db2 on Cloud console interface. On the left, the 'Data objects' panel lists a table named 'SHQ81471'. The main area displays a script editor with two SQL insert statements:

```
1 insert into userinfo values('raji','raji123@gmail.com','raji123',1);
2 insert into userinfo values('charu','charu78@gmail.com','cha123',2);
3
```

Below the script editor, the 'History' tab shows the execution results:

Script	Date	Status	Runtime
Untitled - 1	Oct 1, 2022 6:36:51 PM	2	0.012 s
insert into userinfo values('raji','raji123@gmail.com','raji123',1);		0.007 s	
insert into userinfo values('charu','charu78@gmail.com','cha123',2);		0.005 s	

The screenshot shows the IBM Db2 on Cloud console interface, specifically the 'Tables' tab. The table 'SHQ81471.USERINFO' is selected. The table structure is displayed as follows:

USERNAME	MAIL	PASSWORD	ROLLNUMBER
charu	charu78@gmail.com	cha123	2
raji	raji123@gmail.com	raji123	1

## Question-2:

Perform UPDATE,DELETE Queries with user table

**Solution:**

**Update**

The screenshot shows the IBM Db2 on Cloud interface. On the left, the 'Data objects' pane shows a table named 'SHQ81471'. The main editor area shows a script with the following SQL statement:

```
1 update userinfo
2 set username='raji',mail='raji678@gmail.com'
3 where rollnumber=1;
```

Below the script editor, the 'History' pane displays a table of executed scripts:

Script	Date	Status	Runtime
Untitled - 2	Oct 1, 2022 6:46:57 PM	1	0.019 s
update userinfo set username='raji',mail='raji678@gmail.com' where rollnumbe...			0.019 s
Untitled - 2	Oct 1, 2022 6:45:38 PM	1	0.014 s
Untitled - 1	Oct 1, 2022 6:38:51 PM	2	0.012 s

The screenshot shows the IBM Db2 on Cloud interface displaying the 'SHQ81471.USERINFO' table. The table has the following columns: USERNAME, MAIL, PASSWORD, and ROLLNUMBER. The data is as follows:

USERNAME	MAIL	PASSWORD	ROLLNUMBER
charu	charu78@gmail.com	cha123	2
raji	raji678@gmail.com	raji78	1

## Delete

The screenshot shows the IBM Db2 on Cloud interface with a new script in the editor:

```
1 delete from userinfo where username='charu';
```

The 'History' pane shows the execution of this script:

Script	Date	Status	Runtime
Untitled - 3	Oct 1, 2022 6:51:11 PM	1	0.004 s
delete from userinfo where username='charu'			0.004 s
Untitled - 2	Oct 1, 2022 6:46:57 PM	1	0.019 s
update userinfo set username='raji',mail='raji678@gmail.com' where rollnumb...			0.019 s
Untitled - 1	Oct 1, 2022 6:38:51 PM	1	0.014 s

IBM Db2 on Cloud

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

SQL

SHQ81471.USERINFO

Export to CSV

USERNAME	MAIL	PASSWORD	ROLLNUMBER
raji	raji678@gmail.com	rajiraji	1

### Question-3:

Connect python code to db2.

#### Solution:

```
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=9938aec0-8105-433e-8bf9-0fbb7e483086.clogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32459;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=bln00610;PWD=sGduNe7FvZR2LzTo", '', '')
```

sheep-logo

### Register Form

{{ msg }}

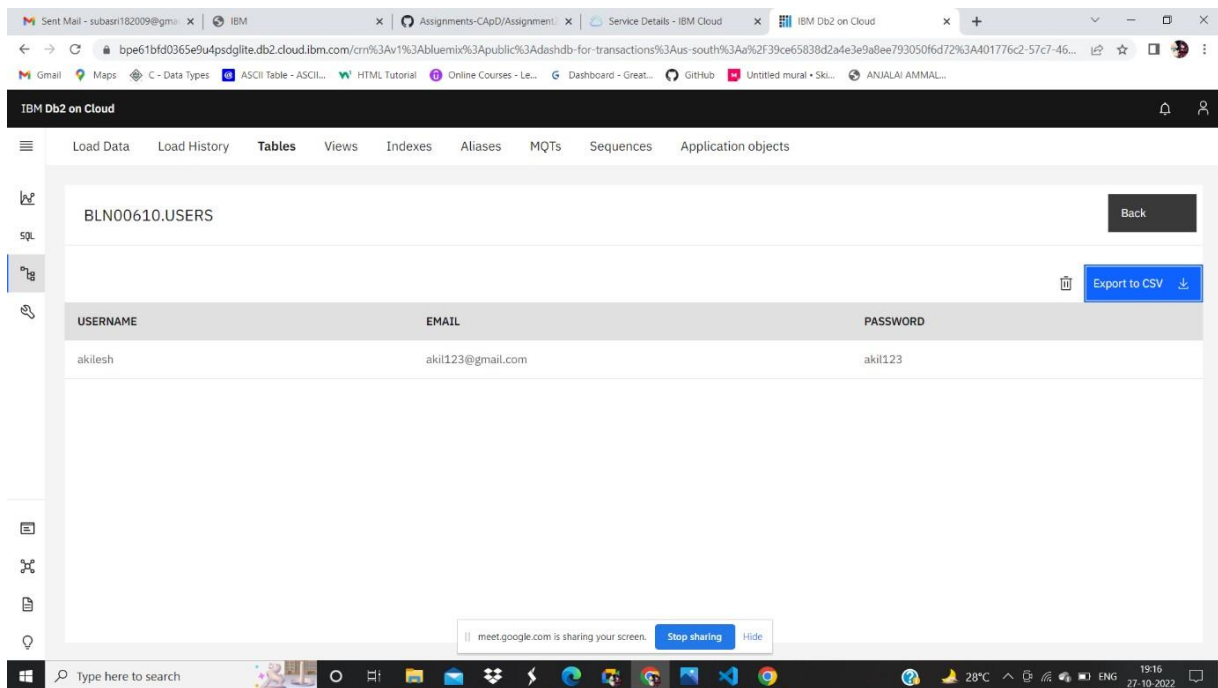
akilesh

akil123@gmail.com

\*\*\*\*\*

Register

already have an account ? please login [login!](#)



#### Question-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

#### Solution:

##### App.py

```
# -*- coding: utf-8 -*-
"""
Created on Sat Oct 1 19:03:39 2022

@author: SUBASRI
"""

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=9938aec0-8105-433e-8bf9-0fbb7e483086.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32459;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=bln00610;PWD=sGduNe7FvZR2LzTo", '', '')

def homer():
```

```
return render_template('home.html')
```

```
@app.route('/login', methods = ['GET', 'POST'])
```

```
def login():
```

```
    global userid
```

```
    msg=" "
```

```
    if request.method == 'POST' :
```

```
        username = request.form['username']
```

```
        email = request.form['email']
```

```
        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.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)
```

```
@app.route('/register', 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('/dashboard')
def dash():

    return render_template('dashboard.html')

@app.route('/apply', methods = ['GET', 'POST'])
def apply():
    msg = ''
    if request.method == 'POST' :
        username = request.form['username']
        email = request.form['email']

        qualification= request.form['qualification']
        skills = request.form['skills']
        jobs = request.form['s']
        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 = 'there is only 1 job position! for you'
            return render_template('apply.html', msg = msg)

        insert_sql = "INSERT INTO job 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, qualification)
        ibm_db.bind_param(prepare_stmt, 4, skills)
        ibm_db.bind_param(prepare_stmt, 5, jobs)
        ibm_db.execute(prepare_stmt)
        msg = 'You have successfully applied for job !'

```

```

        session['loggedin'] = True
        TEXT = "Hello,a new application for job position" +jobs+"is
requested"

        elif request.method == 'POST':
            msg = 'Please fill out the form !'
            return render_template('apply.html', msg = msg)

@app.route('/display')
def display():
    print(session["username"],session['id'])

    cursor = mysql.connection.cursor()
    cursor.execute('SELECT * FROM job WHERE userid = % s', (session['id'],))
    account = cursor.fetchone()
    print("accountdisplay",account)

    return render_template('display.html',account = account)

@app.route('/logout')

def logout():
    session.pop('loggedin', None)
    session.pop('id', None)
    session.pop('username', None)
    return render_template('home.html')

if __name__ == '__main__':
    app.run(host='0.0.0.0')

```

## Registration page

```

<!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>JOBPORTAL | 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/favicon-32x32.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/font-awesome/4.7.0/css/font-
awesome.css">
    <!-- css stylesheet -->
    <link rel="stylesheet" href="css/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 -->
    <div class="logo mt-3 text-center">
        <a class="main-logo-img mt-5" href="#">
            <!-- <a class="navbar-brand" href="index.html">JobPortal</a> -->
        </a>
    </div>
    <!-- navbar ends -->
    <!-- Login form -->
    <div class="login text-center mt-5">
        <h2> Register Form </h2>
        <form action="/register" method="post">
            <div class="msg">{{ msg }}</div>
            <!-- <input type="text" placeholder="fullname" id="fullname">
</br></br> -->

            <input type="text" name="username" placeholder="Enter Your
Username" id="username" required></br></br>
            <input type="email" name="email" placeholder="Enter Your Email
ID" id="email" required></br></br>
            <input type="password" name="password" placeholder="Enter Your
Password" id="password" required></br></br>

        </br>

```

```

        </br>
        <button type="submit" id="button" class="btn btn-primary"> Register
</button>
    </form>
</div>

<div class="note mt-3 text-center"> <!--Register form -->
<p> already have an account ? please login <a href="/login">login! </a>
</p>

</div>
</body>
</html>

```

## Login page

```

<!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>JOBPORTAL | 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/favicon-32x32.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/font-awesome/4.7.0/css/font-
awesome.css">
    <!-- css stylesheet -->
    <link rel="stylesheet" href="css/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 -->
    <div class="logo mt-3 text-center">
        <a class="main-logo-img mt-5" href="#">
            <!-- <a class="navbar-brand" href="index.html">JobPortal</a> -->
        </a>
    </div>
    <!-- navbar ends -->
    <!-- Login form -->
    <div class="login text-center mt-5">
        <h2> Login Form </h2>
        <form action="/login" method="post">
            <div class="msg">{{ msg }}</div>
            <input type="text" name="username" placeholder="Enter Your
Username" id="username" required></br></br>
            <input type="password" name="password" placeholder="Enter Your
Password" id="password" required></br></br>
            <br>
            <br>
            <button type="submit" id="button" class="btn btn-primary"> Login
</button>
        </form>
    </div>

    <div class="note mt-3 text-center"> <!--Register form -->
    <p> Don't have an account yet? Click here to <a href="register">register!
</a> </p>
    </div>
</body>
</html>

```



## Register Form

{{ msg }}

akilesh

akil123@gmail.com

\*\*\*\*\*

Register

already have an account ? please login [login!](#)

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

BLN00610.USERS

Export to CSV

USERNAME	EMAIL	PASSWORD
akilesh	akil123@gmail.com	akil123

meet.google.com is sharing your screen. Stop sharing Hide

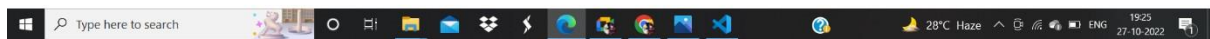


## Login Form

{{ msg }}

Login

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



welcome to job recommender site

meet.google.com is sharing your screen. [Stop sharing](#) [Hide](#)

