

| | |
|---------------------|------------------|
| ASSIGNMENT DATE | 22 OCTOBER 2022 |
| STUDENT NAME | NARMATHA.B |
| STUDENT ROLL NUMBER | 950019104032 |
| MAXIMUM MARKS | 2 MARKS |
| TEAM ID | PNT2022TMID49592 |

ASSIGNMENT 2

1.CREATE USER TABLE WITH USERNAME,ROLLNUMBER,EMAIL,PASSWORD

QUERY:

CREATE TABLE "USER" (USERNAME VARCHAR(15)NOT NULL,ROLLNO VARCHAR(12) NOT NULL,EMAILID VARCHAR(25) NOT NULL ,PASSWORD VARCHAR(8) NOT NULL);

INSERT INTO "USER" VALUES

('NARMATHA','950019104032','Narmi123@gmail.com','NARMI32');

INSERT INTO "USER" VALUES ('RAJ','950019104033','RAJ23@gmail.com','23@RAJ');

INSERT INTO "USER" VALUES ('JAS','950019104034','JASS!56@gmail.com','jas#45');

OUTPUT:

```

Run SQL Command Line
SQL> CREATE TABLE "USER" (USERNAME VARCHAR(15)NOT NULL,ROLLNO VARCHAR(12) NOT NULL,EMAILID VARCHAR(25) NOT NULL ,PASSWORD VARCHAR(8) NOT NULL);
Table created.
SQL> INSERT INTO "USER" VALUES ('NARMATHA','950019104032','Narmi123@gmail.com','NARMI32');
1 row created.
SQL> INSERT INTO "USER" VALUES ('RAJ','950019104033','RAJ23@gmail.com','23@RAJ');
1 row created.
SQL> INSERT INTO "USER" VALUES ('JAS','950019104034','JASS!56@gmail.com','jas#45');
1 row created.
SQL> SELECT*FROM "USER";

```

| USERNAME | ROLLNO | EMAILID | PASSWORD |
|----------|--------------|--------------------|----------|
| NARMATHA | 950019104032 | Narmi123@gmail.com | NARMI32 |
| RAJ | 950019104033 | RAJ23@gmail.com | 23@RAJ |
| JAS | 950019104034 | JASS!56@gmail.com | jas#45 |

```

SQL>

```

2. PERFORM UPDATE AND DELETE QUERIES WITH USER TABLE

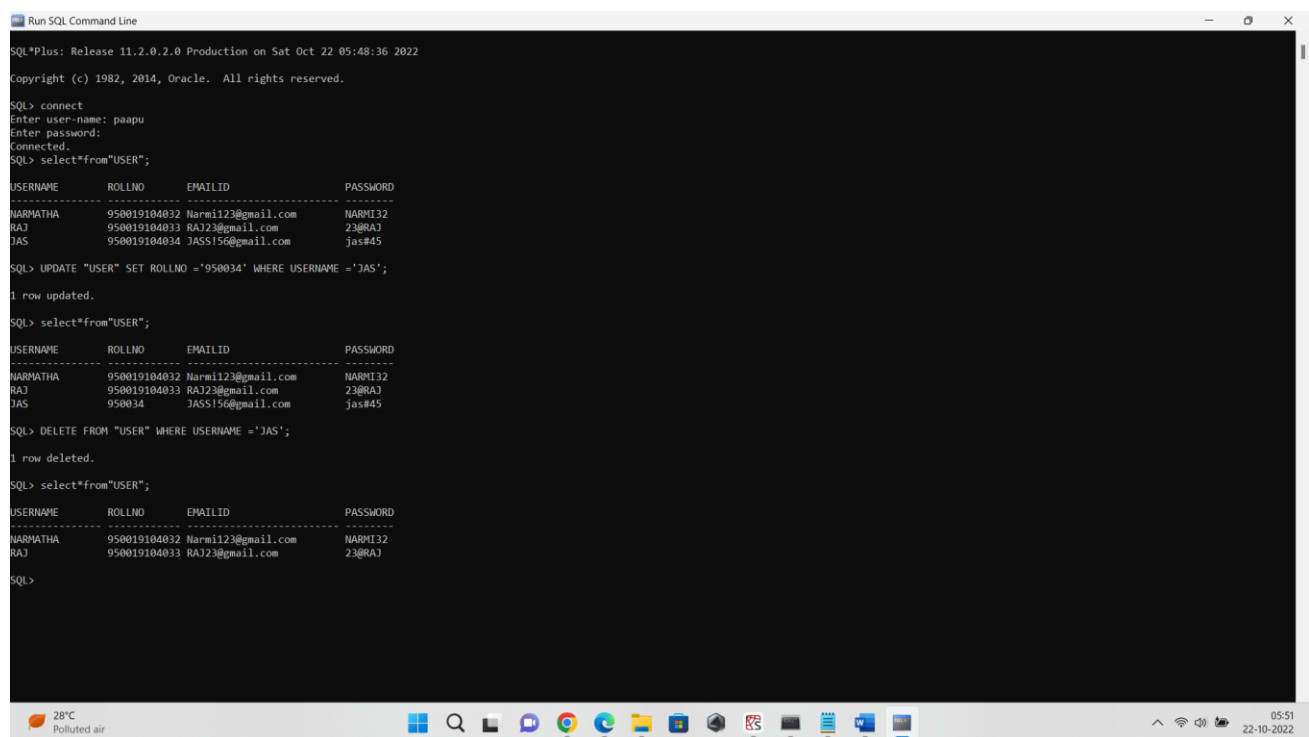
UPDATE QUERY:

```
UPDATE "USER" SET ROLLNO ='950034' WHERE USERNAME ='JAS';
```

DELETE QUERY:

```
DELETE FROM "USER" WHERE USERNAME ='JAS';
```

OUTPUT:



```
Run SQL Command Line
SQL*Plus: Release 11.2.0.2.0 Production on Sat Oct 22 05:48:36 2022
Copyright (c) 1982, 2014, Oracle. All rights reserved.

SQL> connect
Enter user-name: paapu
Enter password:
Connected.
SQL> select*from"USER";

USERNAME      ROLLNO      EMAILID      PASSWORD
-----
NARMATHA      950019104032 Narmi123@gmail.com NARM132
RAJ           950019104033 RAJ23@gmail.com 23@RAJ
JAS           950019104034 JAS156@gmail.com jas#45

SQL> UPDATE "USER" SET ROLLNO ='950034' WHERE USERNAME ='JAS';

1 row updated.

SQL> select*from"USER";

USERNAME      ROLLNO      EMAILID      PASSWORD
-----
NARMATHA      950019104032 Narmi123@gmail.com NARM132
RAJ           950019104033 RAJ23@gmail.com 23@RAJ
JAS           950034      JAS156@gmail.com jas#45

SQL> DELETE FROM "USER" WHERE USERNAME ='JAS';

1 row deleted.

SQL> select*from"USER";

USERNAME      ROLLNO      EMAILID      PASSWORD
-----
NARMATHA      950019104032 Narmi123@gmail.com NARM132
RAJ           950019104033 RAJ23@gmail.com 23@RAJ

SQL>
```

3.CONNECT PYTHON CODE TO DB2

```
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=b1bc1829-6f45-4cd4-bef4-1bbf73c5-
d84a-4bb0-85b9-
ab1a4348f4a4.c3n41cmd0nqnrk39u98g.databases.appdomain.cloud;PORT=32286;SECURITY=SSL
;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=jmf44160;PWD=xFr122zRwL6A9eJP",",")
```

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.

BASE.HTML:

```
<!DOCTYPE html>

<html>

<head>

<title>Page Title</title>

<style>

a:visited {

    color: #663333;

    background-color: transparent;

    text-decoration: none;

}

</style>

{ % block head % } { % endblock % }

<!-- <link rel="stylesheet" href="static/css/style.css"> -->

<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
iYQeCzEYFbKjA/T2uDLTpkwGzCiq6soy8tYaI1GyVh/UjpbCx/TYkiZhlZB6+fzT"
crossorigin="anonymous">

<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/js/bootstrap.bundle.min.js"
integrity="sha384-
u1OknCvxWvY5kfmNBILK2hRnQC3Pr17a+RTT6rIHI7NnikvbZlHgTPOOmMi466C8"
crossorigin="anonymous"></script>

</head>

<body>

<a href="/register"><center><i><h4>REGISTER</h4></i></center></a>&nbsp;

<a href="/login"><center><i><h4>LOGIN</h4></i><?center></a>&nbsp;

<hr><br>

<div class="container">

{ % block body % } { % endblock % }

</div>

</body>

</html>
```

INDEX.HTML:

```
{% extends 'base.html' %}

{% block head %}

<title>Home Page</title>

<style>

body {

    background-image:
url('https://i.pinimg.com/originals/cc/d7/b5/ccd7b515d2018509d9d3acf0cfd65d05.jpg'); background-
repeat: no-repeat; background-size: cover;}

</style>

{% endblock %}

{% block body %}

<h1><CENTER><b>HELLO</b></CENTER></h1>

<h2><CENTER><p>WELCOME TO MY WEBSITE</p></CENTER></h2>

<h2><CENTER><p>THIS IS NARMATHA</p></CENTER></h2>

<hr><br>

{% endblock %}
```

LOGIN.HTML:

```
<html>

<head>

<meta charset="UTF-8">

<title> Login </title>

<style>

body {

    background-image:
url('https://i.pinimg.com/originals/cc/d7/b5/ccd7b515d2018509d9d3acf0cfd65d05.jpg'); background-
repeat: no-repeat; background-position: center;background-size: cover;}

</style>

</head>

<body ></br></br></br></br></br>

<table align="center" height="500" width="400" bgcolor="#C4ACAC">

<tr ><td>
```

```

<div align="center">
<div align="center" class="border">
<div class="header">
<h1 class="word">Login</h1>
</div></br></br></br>
<h2 class="word">
<form action="{{ url_for('login') }}" method="post">
<div class="msg">{{ msg }}</div>
<input id="username" name="username" type="text" placeholder="Enter Your
Username" class="textbox"/></br></br>
<input id="password" name="password" type="password" placeholder="Enter Your
Password" class="textbox"/></br></br></br>
<input type="submit" class="btn" value="Sign In"></br></br>
</form>
</h2>
<p class="bottom">Don't have an account? <a class="bottom"
href="{{ url_for('register') }}"> Sign Up here</a></p>
</div>
</div>
</td>
</tr>
</table>
</body>
</html>

```

REGISTER.HTML:

```

<html>
<head>
<meta charset="UTF-8">
<title> Register </title>
<style>
body {background-image:
url('https://i.pinimg.com/originals/cc/d7/b5/ccd7b515d2018509d9d3acf0cf65d05.jpg'); background-
repeat: no-repeat; background-position: center;background-size: cover;}

```

```
</style>
</head>
<body></br></br></br></br></br>
<table align="center" height="500" width="400" bgcolor="#C4ACAC">
<tr ><td>
<div align="center">
<div align="center" class="border">
<div class="header">
<h1 class="word">Register</h1>
</div></br></br></br>
<h2 class="word">
<form action="{ { url_for('register') } }" method="post">
<div class="msg">{ { msg } }</div>
<input id="username" name="username" type="text" placeholder="Enter Your
Username" class="textbox"/></br></br>
<input id="password" name="password" type="password" placeholder="Enter Your
Password" class="textbox"/></br></br>
<input id="email" name="email" type="text" placeholder="Enter Your Email ID"
class="textbox"/></br></br>
<input type="submit" class="btn" value="Sign Up"></br>
</form>
</h2>
<p class="bottom">Already have an account? <a class="bottom"
href="{ { url_for('login') } }"> Sign In here</a></p>
</div>
</div>
</td>
</tr>
</table>
</body>
</html>
```

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=b1bc1829-6f45-4cd4-bef4-1bbf73c5-
d84a-4bb0-85b9-
ab1a4348f4a4.c3n41cmd0nqnrk39u98g.databases.appdomain.cloud;PORT=32286;SECURITY=SSL
;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=jmf44160;PWD=xFr122zRwL6A9eJP","")

@app.route("/")
def index():
    return render_template('index.html')

@app.route('/login', methods =['GET', 'POST'])
def login():
    global userid
    msg = ""

    if request.method == 'POST' and 'username' in request.form and 'password' in request.form:
        username = request.form['username']
        password = request.form['password']
        stmt = ibm_db.prepare(conn,'SELECT * FROM user WHERE username = ? AND password
= ?')
        ibm_db.bind_param(stmt,1,username)
        ibm_db.bind_param(stmt,2,password)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)
        if account:
            session['loggedin'] = True
            session['username'] = account['USERNAME']
            msg = 'Logged in successfully !'
            return render_template('index.html', msg = msg)
        else:
            msg = 'Incorrect username / password !'
```

```
return render_template('login.html', msg = msg)
```

```
@app.route('/logout')
```

```
def logout():
```

```
    session.pop('loggedin', None)
```

```
    session.pop('id', None)
```

```
    session.pop('username', None)
```

```
    return redirect(url_for('login'))
```

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

```
def register():
```

```
    msg = "
```

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

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

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

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

```
        sql = "SELECT * FROM user 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 = 'Username must contain only characters and numbers !'
```

```
        elif not username or not password or not email:
```

```
            msg = 'Please fill out the form !'
```

```
        else:
```

```
            insert_sql = "INSERT INTO user VALUES (?, ?, ?)"
```



```

stmt = ibm_db.prepare(conn,insert_sql)

ibm_db.bind_param(stmt, 1, username)

ibm_db.bind_param(stmt, 2, password)

ibm_db.bind_param(stmt, 3, email)

ibm_db.execute(stmt)

msg = 'You have successfully registered !'

elif request.method == 'POST':

    msg = 'Please fill out the form !'


return render_template('register.html', msg = msg)

if __name__ == '__main__':

    app.run(debug = True)

```

OUTPUT:

