

Assignment -2

Assignment Date	14 OCTOBER 2022
Student Name	P.A.VASANTH
Student Roll Number	422119104030
Maximum Marks	2 Marks

Question 1.

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

```
CREATE TABLE usertable(  
roll_number int,  
username varchar(300),  
mail varchar(300),  
password varchar(300));
```

	Field	Type	Null	Key	Default	Extra
►	roll_number	int	YES		NULL	
	username	varchar(300)	YES		NULL	
	mail	varchar(300)	YES		NULL	
	password	varchar(300)	YES		NULL	

Question 2.

Perform UPDATE, DELETE Queries with user table

INSERT STATEMENT:

```
INSERT INTO usertable
```

```
(roll_number, username, mail,password) VALUES
(1,Dhivagar,dhivagarb2001@gmail.com,dhiva005),
(2,'Rajesh','rajeshlrn11@gmail.com','rajeshlrn'),
(3,'Tamiloli',tamiloli123@gmail.com','tamil123'),
(4,'Vasanth',vasanthvasu@gmail.com','vasanthvasu12'),
(5,'Yokesh','yokeshmass@gmail.com','yokesh56');
```

	roll_number	username	mail	password
	1	Dhivagar	dhivagarb2001@gmail.com	dhiva005
	2	Rajesh	rajeshlrn11@gmail.com	rajeshlrn
	3	Tamiloli	tamiloli123@gmail.com	tamil123
	4	Vasanth	vasanthvasu@gmail.com	vasanthvasu12
	5	Yokesh	yokeshmass@gmail.com	yokesh56

UPDATE STATEMENT:

UPDATE usertable

SET username='Rajesh'

WHERE roll_number=3;

	roll_number	username	mail	password
►	1	Dhivagar	dhivagarb2001@gmail.com	dhiva005
	2	Rajesh	rajeshlrn11@gmail.com	rajeshlrn
	3	Rajesh	tamiloli123@gmail.com	tamil123
	4	Vasanth	vasanthvasu@gmail.com	vasanthvasu12
	5	Yokesh	yokeshmass@gmail.com	yokesh56

DELETE STATEMENT:

DELETE FROM usertable where roll_number=5;

	roll_number	username	mail	password
▶	1	Dhivagar	dhivagarb2001@gmail.com	dhiva005
	2	Rajesh	rajeshlrn11@gmail.com	rajeshlrn
	3	Rajesh	tamiloli123@gmail.com	tamil123
	4	Vasanth	vasanthvasu@gmail.com	vasanthvasu12

Question 3.

Connect python code to db2.

```

dsn_hostname = "2d46b6b4-cbf6-40eb-bbce-
6251e6ba0300.bs2io90l08kqb1od8lcg.databases.appdomain.cloud"
dsn_uid = "avengers005"
dsn_pwd = "multiverse"
dsn_driver = "{IBM DB2 ODBC DRIVER}"
dsn_database = "DB_ADMIN"
dsn_port = "32328"
dsn_protocol = "TCPIP"
dsn_security = "SSL"
dsn = (
    "DRIVER={0};"
    "DATABASE={1};"
    "HOSTNAME={2};"
    "PORT={3};"
    "PROTOCOL={4};"
    "UID={5};"
    "PWD={6};"
    "SECURITY={7};").format(dsn_driver, dsn_database, dsn_hostname, dsn_port,
dsn_protocol, dsn_uid, dsn_pwd,dsn_security)
print(dsn)
try:
    conn = ibm_db.connect(dsn, "", "")
    print ("Connected to database: ", dsn_database, "as user: ", dsn_uid, "on host: ",
dsn_hostname)

except:
    print ("Unable to connect: ", ibm_db.conn_errormsg() )

```

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 with username and password. If the user is valid show the welcome page

Flask app:

App.py

```
from flask import Flask, render_template, request, redirect, url_for, session

from flask_mysqlldb import MySQL

import MySQLdb.cursors

import re

app = Flask(__name__)

app.secret_key = 'your secret key'

app.config['MYSQL_HOST'] = 'localhost'

app.config['MYSQL_USER'] = 'avengers005'

app.config['MYSQL_PASSWORD'] = 'multiverse'

app.config['MYSQL_DB'] = 'login'

mysql = MySQL(app)

@app.route('/')

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

def login():

    msg = "

    if request.method == 'POST' and 'username' in request.form and 'password' in
request.form:

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

```

password = request.form['password']

cursor = mysql.connection.cursor(MySQLdb.cursors.DictCursor)

cursor.execute('SELECT * FROM accounts WHERE username = % s AND password = % s',
(username, password, ))

account = cursor.fetchone()

if account:

    session['loggedin'] = True

    session['id'] = account['id']

    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' and 'username' in request.form and 'password' in
request.form and 'email' in request.form :

```

```

username = request.form['username']

password = request.form['password']

email = request.form['email']

cursor = mysql.connection.cursor(MySQLdb.cursors.DictCursor)

cursor.execute('SELECT * FROM accounts WHERE username = % s', (username, ))

account = cursor.fetchone()

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:

    cursor.execute('INSERT INTO accounts VALUES (NULL, % s, % s, % s)', (username,
password, email, ))

    mysql.connection.commit()

    msg = 'You have successfully registered !'

elif request.method == 'POST':

    msg = 'Please fill out the form !'

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

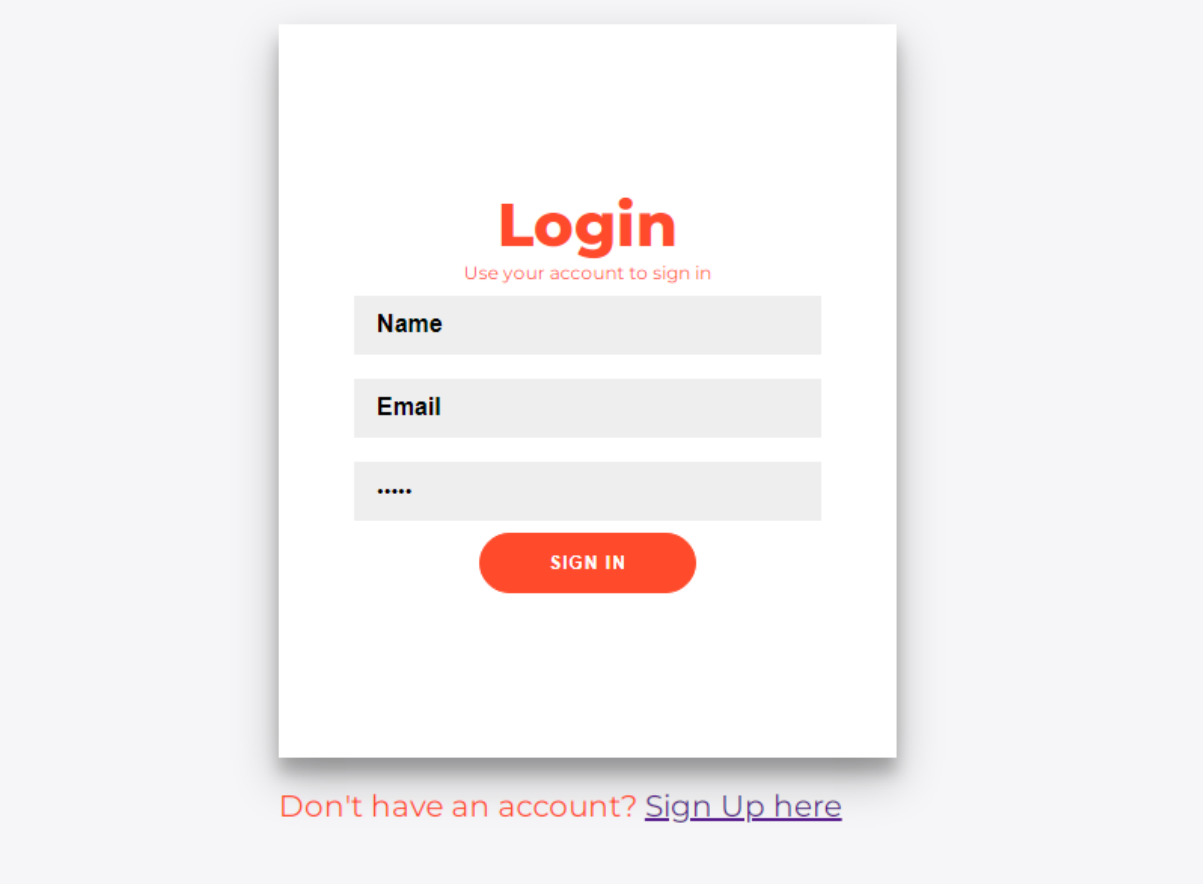
```

```

(env) C:\Users\GREAT\Desktop\login>flask run
* Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use
* Running on http://127.0.0.1:5000
Press CTRL+C to quit

```

LOGIN PAGE:

A login page design featuring a white card on a light gray background. The card has the word "Login" in large red font, followed by the text "Use your account to sign in" in a smaller red font. Below this are three input fields: "Name", "Email", and a password field with four dots. A red "SIGN IN" button is positioned below the fields. At the bottom of the card, there is a link "Don't have an account? Sign Up here" in red text, where "Sign Up here" is underlined.

Login

Use your account to sign in

Name

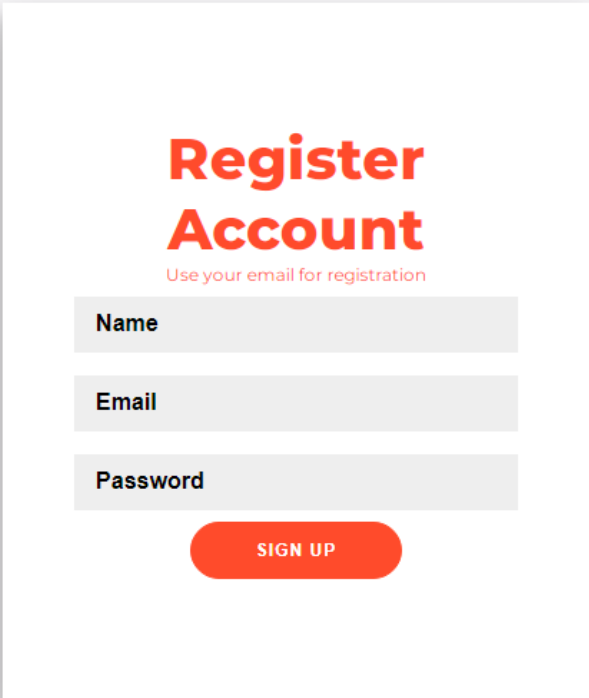
Email

....

SIGN IN

Don't have an account? [Sign Up here](#)

REGISTER PAGE:



Register Account
Use your email for registration

Name

Email

Password

SIGN UP

Already have an account? [Sign In here](#)

The registration form is centered on a light gray background. It features a white card with a subtle drop shadow. The title 'Register Account' is in a large, bold, red font. Below it, the subtitle 'Use your email for registration' is in a smaller, red font. There are three input fields: 'Name', 'Email', and 'Password', each with a light gray border and a label above it. A red 'SIGN UP' button is positioned below the password field. At the bottom of the card, there is a link 'Sign In here' in blue text, preceded by the text 'Already have an account?' in red.

WELCOME PAGE:

Welcome User!!!

The welcome message is displayed in a large, bold, red font, centered on a light gray background.