

Assignment -2

Assignment Date	30 September 2022
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Student Roll Number	9517201904088
Maximum Marks	2 Marks

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

CREATE TABLE USER

```
(EMAIL VARCHAR(30) NOT NULL,  
  USERNAME VARCHAR(24) NOT NULL,  
  ROLLNO CHAR(3) NOT NULL,  
  PASSWORD VARCHAR(6) NOT NULL)  
IN DATABASE DSN8D11A  
VALIDPROC DSN8EAPR;
```

2. Perform UPDATE,DELETE Queries with user table

Delete:

EXEC SQL DELETE FROM USER

WHERE USERNAME = 'E11' OR USERNAME = 'D21';

Update:

UPDATE USER

SET ROLLNO='3565'

WHERE USERNAME='000190';

3. Connect python code to db2.

```
import ibm_db
```

```
conn = ibm_db.connect("database","username","password")
```

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

Store this code in 'app.py' file

```
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'] = 'root'
```

```
app.config['MYSQL_PASSWORD'] = 'your password'
```

```
app.config['MYSQL_DB'] = 'geeklogin'
```

```
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)
```