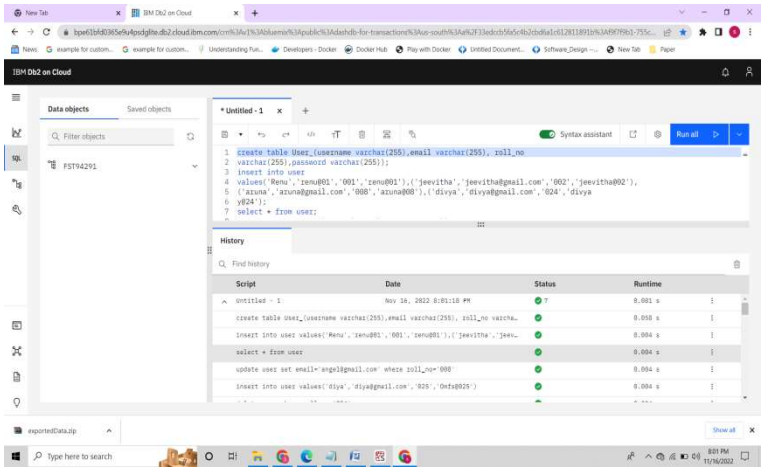
1) Create User table with user with email, username, roll number, password. Perform UPDATE,DELETE Queries with user table.

```
create table user(username varchar(255),email varchar(255), roll_no
varchar(255),password varchar(255));
insert into user
values('Renu','renu@01','001','renu@01'),('jeevitha','jeevitha@gmail.com','002','jeevitha@02'),
('aruna','aruna@gmail.com','008','aruna@08'),('divya','divya@gmail.com','024','divya
y@24');
select * from user;
update user set email='angel@gmail.com' where roll_no='008';
insert into user values('diya','diya@gmail.com','025','Omfs@025');
delete user where roll_no='024';
select * from user;
```



2) Connect python code to db2.

```
from flask import Flask, render_template, request, redirect, url_for, session
import ibm_db
import db2
import re
hostname = '19af6446-6171-4641-8aba   9dcff8e1b6ff.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud'
uid = 'pqw81844'
pwd = 'U9EkEP2DEWnscaL6'
driver = "{IBM DB2 ODBC DRIVER}"
db_name = 'Bludb'
port = '30699'
protocol = 'TCPIP'
cert = "C:/Users/Jeeva/Desktop/ASSGN_NO_2/certi.crt"
dsn = (
"DATABASE ={0};"
"HOSTNAME ={1};"
"PORT ={2};"
"UID ={3};"
"SECURITY=SSL;"
"PROTOCOL={4};"
"SSlServerCertificate={5};"
"PWD ={6};"
).format(db_name, hostname, port, uid, protocol, cert, pwd)
print(dsn)
try:
    print("Connecting to db2.....")
    db2 = ibm_db.connect(dsn, "", "")
    print()
    print("Connected to database")
    print("Connection Successful!!!")
```

```
except Exception as exception:
   print("unable to connect ", exception)
```

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.

```
from flask import Flask, render_template, request, redirect, url_for, session
 from flask_mysqldb import MySQL
import MySQLdb.cursors
 import reapp = 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)
```