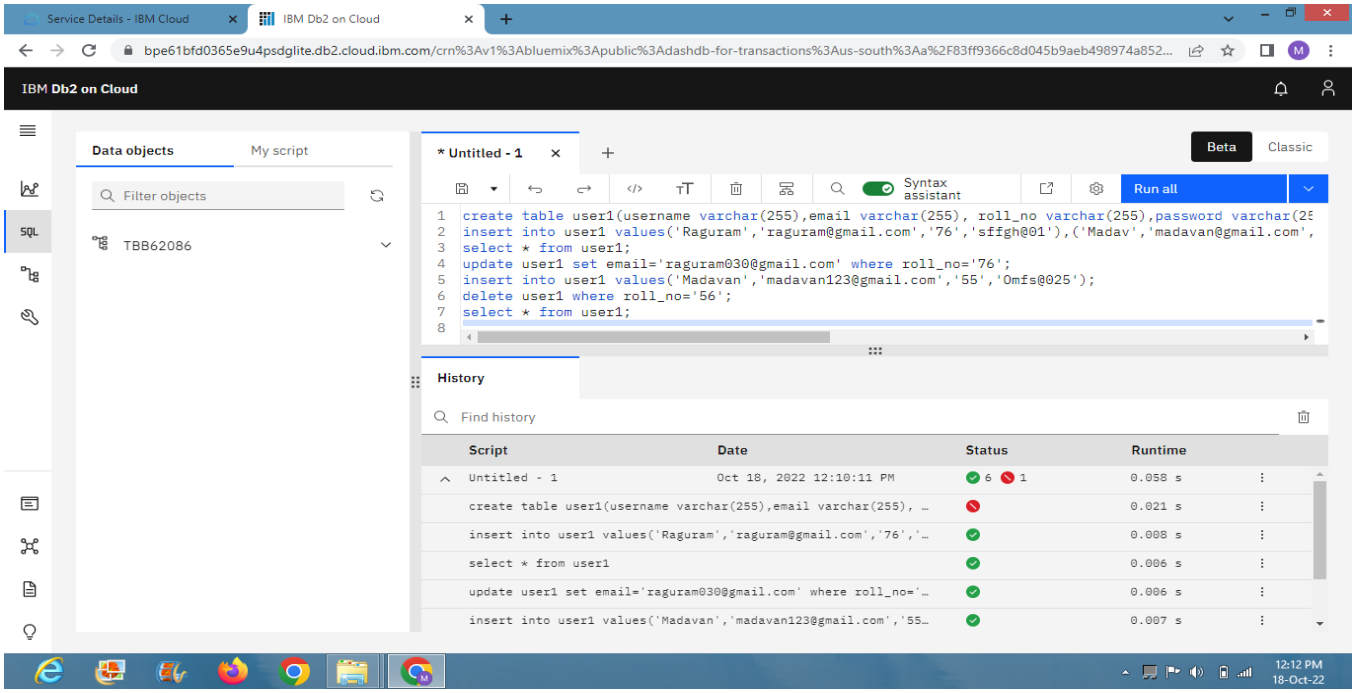
ASSIGNMENT - 2

1, 2: Create user table with EMAIL, USERNAME ,ROLL_NO, PASSWORD and perform insert ,update and delete.

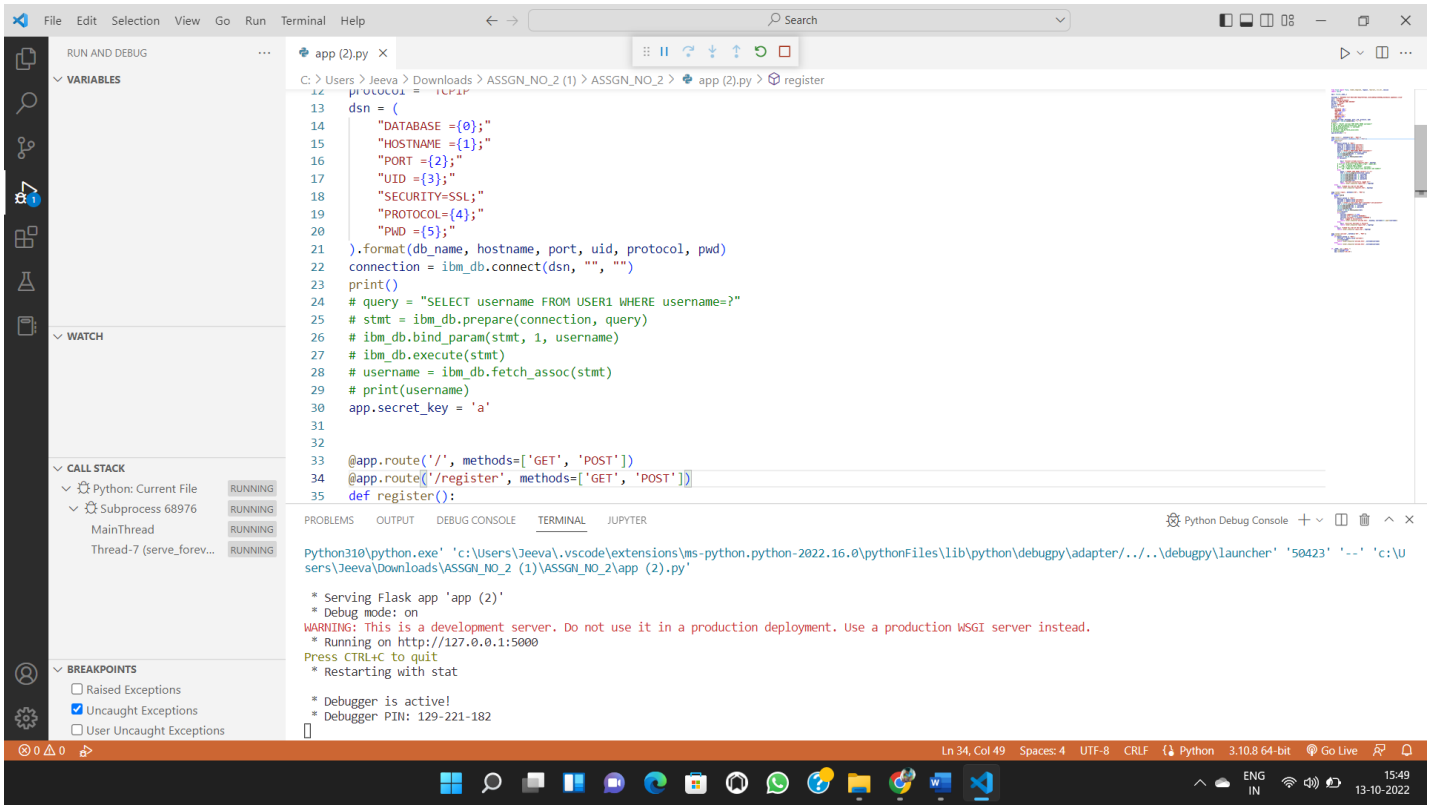
QUERY:

```
create table user1(username varchar(255),email varchar(255), roll_no varchar(255),password varchar(255));

insert into user1
values('Raguram','raguram@gmail.com','76','sffgh@01'),('Madav','madavan@gmail.com','56','Zxfm@02'),('Sridhar','sridhar@gmail.com','87','Qwrty@07'),('Monishkumar','monishkumar@gmail.com','59','monishkumar@gmail.com');

select * from user1;

update user1 set email='raguram030@gmail.com' where roll_no='76';

insert into user1 values('Madavan','madavan123@gmail.com','55','Omfs@025');

delete user1 where roll_no='56';

select * from user1;
```



3. Connect python to db2

```
from flask import Flask, render_template, request, redirect, url_for, session
import ibm_db
import db
import db2
import re

hostname = "54a2f15b-5c0f-46df-8954-7e38e612c2bd. c1ogj3sd0tgtu01qde00.databases.appdomain.cloud",
uid = " cbw06820",
pwd = " tym0zHaa1FXLiTdx",
driver = "{IBM DB2 ODBC DRIVER}"
db_name = 'Bludb'
port = '32733'
protocol = 'TCPIP'
dsn = (
        "DATABASE ={0};"
        "HOSTNAME ={1};"
        "PORT ={2};"
        "UID ={3};"
        "SECURITY=SSL;"
        "PROTOCOL={4};"
        "PWD ={5};"
).format(db_name, hostname, port, uid, protocol, pwd)
connection = ibm_db.connect(dsn, "", "")
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) ACCESS LOGIN WITH CONNTING TO DATABASE

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

app = Flask(__name__)

hostname = "54a2f15b-5c0f-46df-8954-7e38e612c2bd. c1ogj3sd0tgtu01qde00.databases.appdomain.cloud",

uid = " cbw06820"
pwd = "tym0zHaa1FXLiTdx",
driver = "{IBM DB2 ODBC DRIVER}"
db_name = 'Bludb'
port = 32733
protocol = 'TCPIP'
dsn = (
    "DATABASE ={0};"
    "HOSTNAME ={1};"
    "PORT ={2};"
    "UID ={3};"
    "SECURITY=SSL;"
    "PROTOCOL={4};"
    "PWD ={5};"
).format(db_name, hostname, port, uid, protocol, pwd)
connection = ibm_db.connect(dsn, "", "")
print()
```

```
# query = "SELECT username FROM USER1 WHERE username=?"
# stmt = ibm_db.prepare(connection, query)
# ibm_db.bind_param(stmt, 1, username)
# ibm_db.execute(stmt)
# username = ibm_db.fetch_assoc(stmt)
# print(username)
app.secret_key = 'a'

@app.route('/', methods=['GET', 'POST'])
@app.route('/register', methods=['GET', 'POST'])
def register():
    msg = " "
    if request.method == 'POST':
        username = request.form['username']
        email_id = request.form['email_id']
        phone_no = request.form['phone_no']
        password = request.form['password']
        query = "SELECT * FROM USER1 WHERE username=?;"
        stmt = ibm_db.prepare(connection, query)
        ibm_db.bind_param(stmt, 1, username)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)
        if (account):

            msg = "Account already exists!"
            return render_template('register.html', msg=msg)
        # elif not re.match(r'[^@]+@[^@]+\.[^@]+', email_id):
        #     msg = "Invalid email addres"
        # elif not re.match(r'[A-Za-z0-9+', username):
        #     msg = "Name must contain only characters and numbers"
        else:
            query = "INSERT INTO USER1 values(?,?,?,?)"
            stmt = ibm_db.prepare(connection, query)
            ibm_db.bind_param(stmt, 1, username)
            ibm_db.bind_param(stmt, 2, email_id)
            ibm_db.bind_param(stmt, 3, phone_no)
            ibm_db.bind_param(stmt, 4, password)
            ibm_db.execute(stmt)
            msg = 'You have successfully Logged In!!'
            return render_template('login.html', msg=msg)
    else:
        msg = 'PLEASE FILL OUT OF THE FORM'
        return render_template('register.html', msg=msg)

@app.route('/login', methods=['GET', 'POST'])
def login():
    global userid
    msg = ' '
    if request.method == "POST":
        username = request.form['username']
        password = request.form['password']
        query = "select * from user1 where username=? and password=?"
        stmt = ibm_db.prepare(connection, query)
        ibm_db.bind_param(stmt, 1, username)
        ibm_db.bind_param(stmt, 2, password)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)
        print(account)
        if account:
            session['Loggedin'] = True
            session['id'] = account['USERNAME']
            session['username'] = account['USERNAME']
            msg = 'Logged in Successfully'
            return render_template('welcome.html', msg=msg, username=str.upper(username))
        else:
            msg = 'Incorrect Username or Password'
            return render_template('login.html', msg=msg)
    else:
        msg = 'PLEASE FILL OUT OF THE FORM'
        return render_template('login.html', msg=msg)
```

```python
@app.route('/welcome', methods=['GET', 'POST'])
def welcome():
    if request.method == 'POST':
        username = request.form['username']
        print(username)
        return render_template('welcome.html', username=username)
    else:
        return render_template('welcome.html', username=username)

if __name__ == "__main__":
    app.run(debug=True)
    app.run(host='0.0.0.0')
```