Assignment-2

Project Domain	Cloud Application Development
Project Title	Customer Care Registry.
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Date	03rd Oct 2022

Questions:

1. Create registration page in html with username, email, and phone number and by using POST method display it in next html page.
2. Develop a flask program which should contain at least 5 packages used from pypi.org.
3. Create User table with user with email, username, roll number, password. 4. Perform UPDATE, DELETE Queries with user table
5. Connect python code to db2.
6. 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.

Answers:

1.Create registration page in html with username, email, and phone number and by using POST method display it in next html page.

Login.html:

```
<html>
<body>
        <center>
        <form action = "http://localhost:3890/login" method = "post">
                <h1>
                Enter user Name:<input type = "text" name = "userName"/><br><br>
                Enter Email-id:<input type = "text" name = "emailId"/><br><br>
               Enter Phone Number:<input type = "text" name
 "phoneNumber"/><br><br>
                <input type = "submit" value = "SUBMIT"/>
```

```
        </h1>
        </form>                                                                    =
        </center>
</body>
</html>
```

Sample.py:

```
from flask import Flask, redirect, url_for, request app
= Flask(__name__)

@app.route('/login', methods=['POST'])
def login():   if request.method == 'POST':
                    user_name = request.form['userName']                email_id =
request.form['emailId']                phone_number = request.form['phoneNumber']
          return  '{}{}{}{}{}{}{}'.format("<center><h1>Your  user      name  is:
",user_name,"</h1><br><br><h2>Your  email-id  is:  ",email_id,"</h2><br><br><h3>Your
phone number is: ",phone_number,"</h3></center>")

if __name__ == '__main__':
          app.run('127.0.0.1',3890)
```

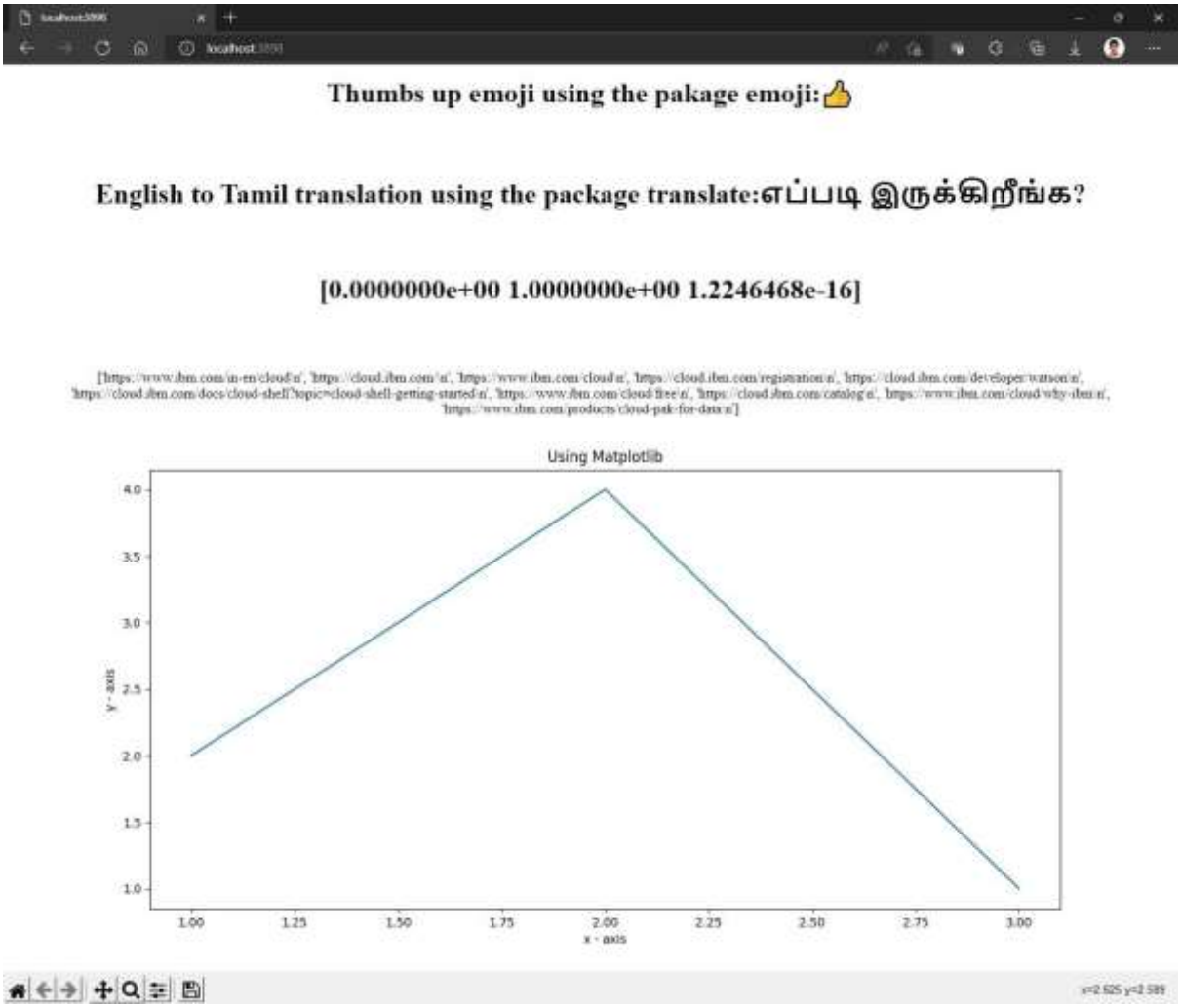
2.Develop a flask program which should contain at least 5 packages used from pypi.org.

Packages used:

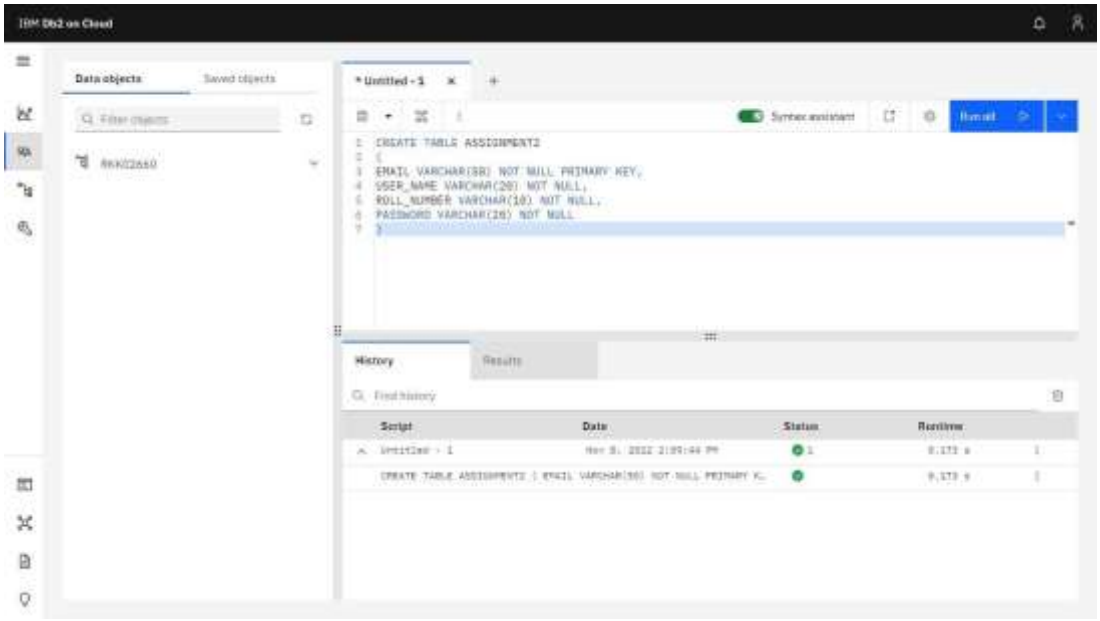
Flask, emoji, matplotlib, numpy, translate, googlesearch

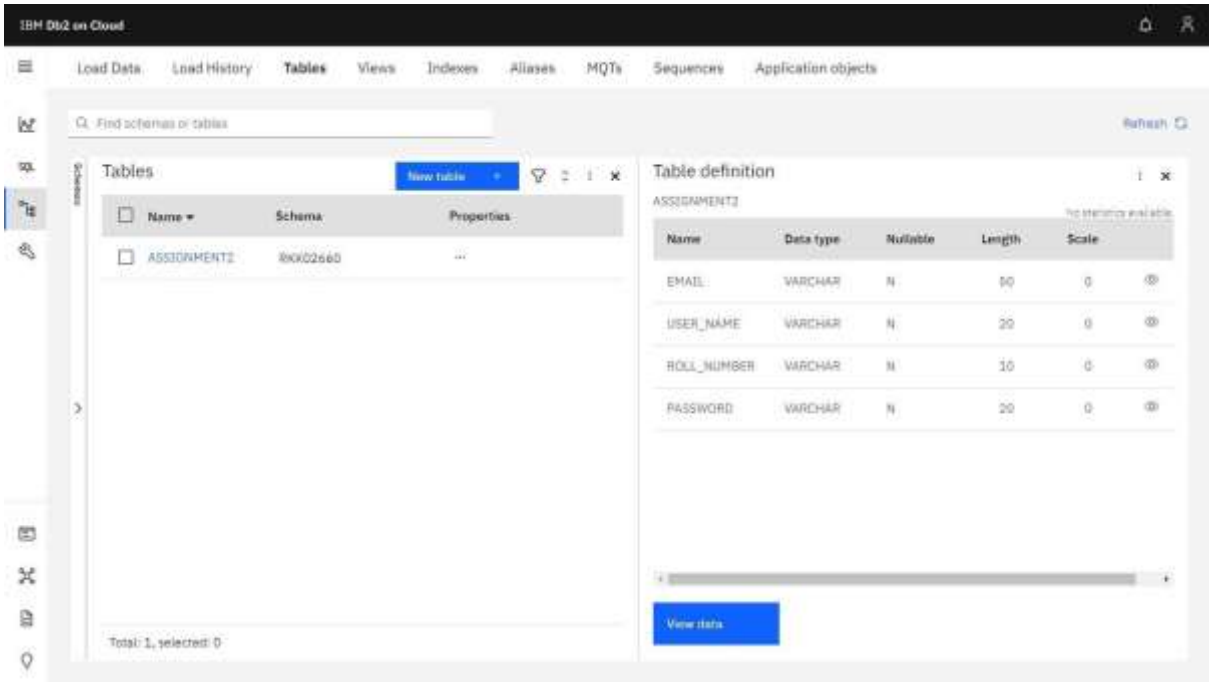
Packages.py: from flask
import Flask from emoji
import emojize import
matplotlib.pyplot as plt
import numpy as np from
translate import Translator
from googlesearch import search

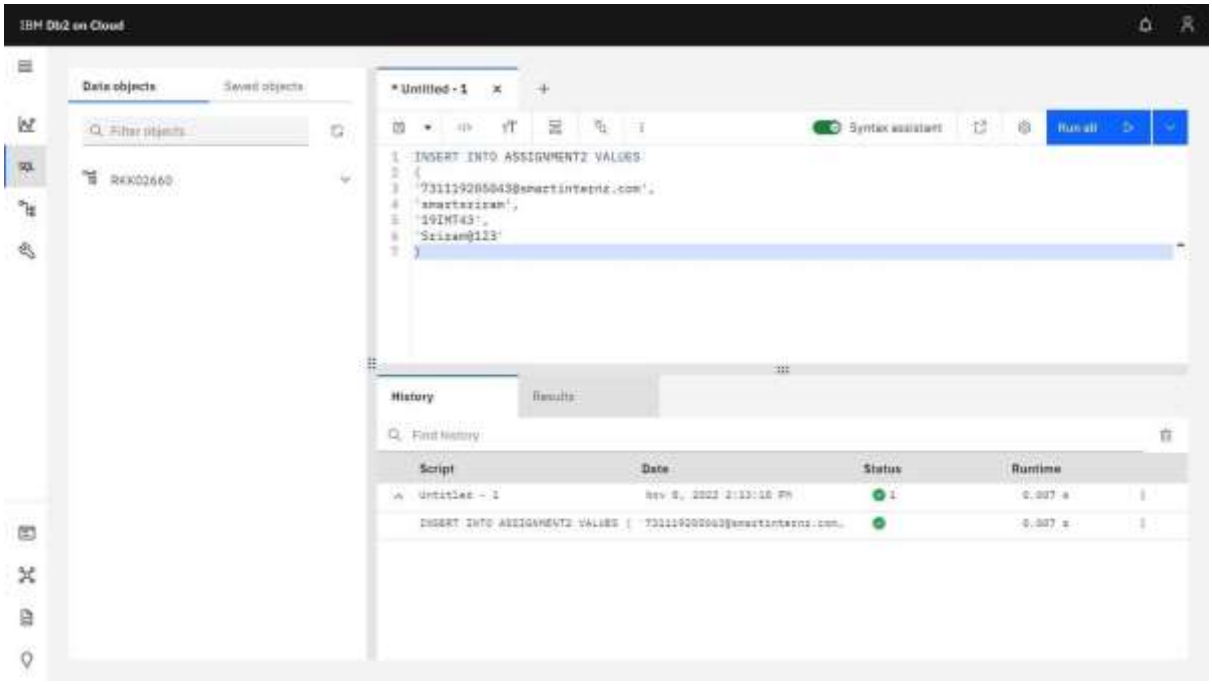
```
app=Flask(__name__)

@app.route('/') def login():     emojione=("Thumbs up emoji using the pakage
emoji:"+emojize(":thumbs_up:"))

   x = [1,2,3]      y = [2,4,1]
plt.plot(x, y)      plt.xlabel('x -
axis')      plt.ylabel('y - axis')
plt.title('Using Matplotlib')
plt.show()      a = np.array([0,
np.pi/2, np.pi])

   translator= Translator(to_lang="ta")
   translation =          ("English          to          Tamil translation          using the          package
translate:"+translator.translate("How are you?"))

   query = "IBM Cloud"     tmp=search(query, tld="co.in",
num=10, stop=10, pause=2)     res=[]     for i in tmp:
res.append(i+"\n")

   return
("<center>"+"<h1>"+emojione+"</br></br></br>"+translation+"</br></br></br>"+str(np.
sin(a))+"</h1></br></br></br>"+str(res)+"</center>")

if __name__ == '__main__':
          app.run('127.0.0.1',3898,debug=True)
```

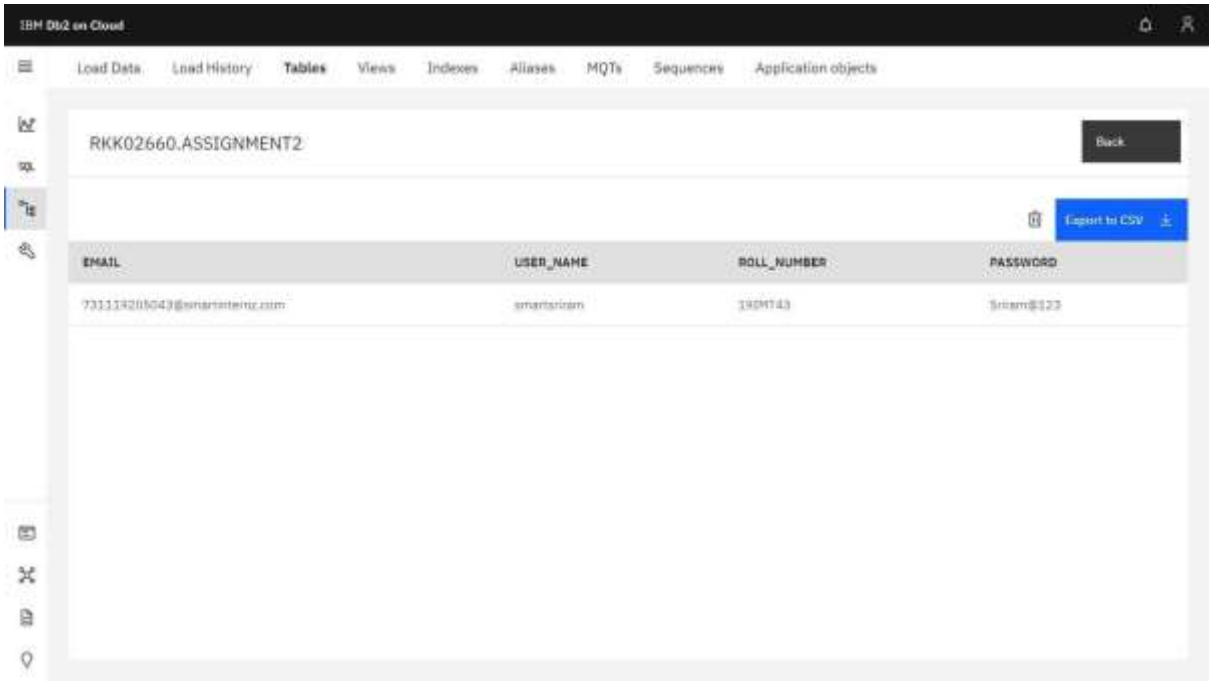


3.Create User table with user with email, username, roll number, password.

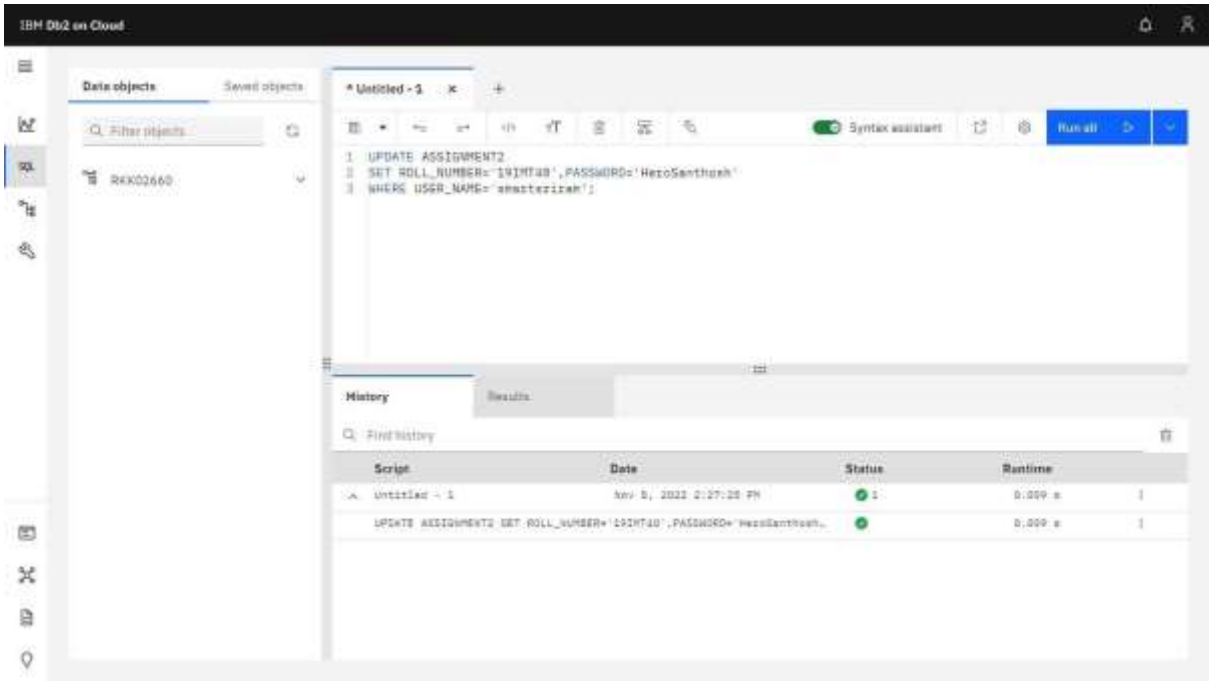

IBM Db2 on Cloud
Data objects
Saved objects
RKK02660
* Untitled - 1
Run all
1 CREATE TABLE ASSIGNMENT2
2 (
3 EMAIL VARCHAR(50) NOT NULL PRIMARY KEY,
4 USER_NAME VARCHAR(20) NOT NULL,
5 ROLL_NUMBER VARCHAR(10) NOT NULL,
6 PASSWORD VARCHAR(20) NOT NULL
7)
History
Results
Script
Date
Status
Runtime

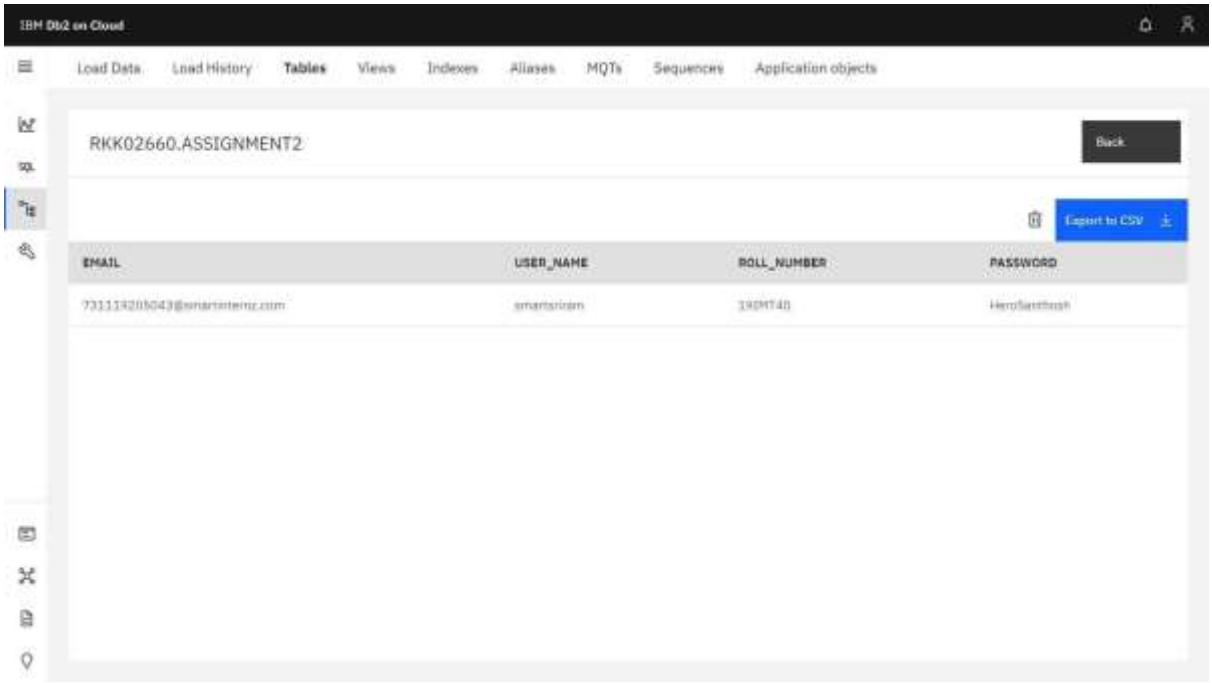

IBM Db2 on Cloud
Load Data
Load History
Tables
Views
Indexes
Aliases
MQTs
Sequences
Application objects
Refresh
Tables
New table
Name
Schema
Properties
ASSIGNMENT2
RKK02660
Total: 1, selected: 0
Table definition
ASSIGNMENT2
Name
Data type
Nullable
Length
Scale
EMAIL
VARCHAR
N
50
0
USER_NAME
VARCHAR
N
20
0
ROLL_NUMBER
VARCHAR
N
10
0
PASSWORD
VARCHAR
N
20
0
View data

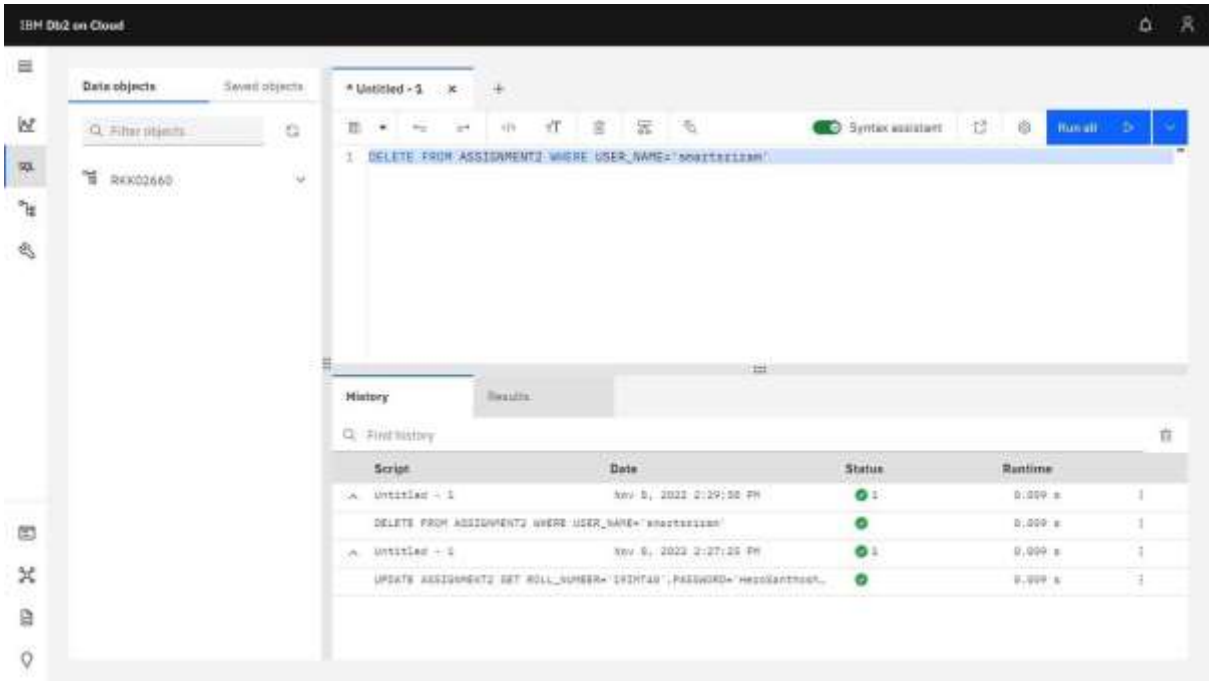


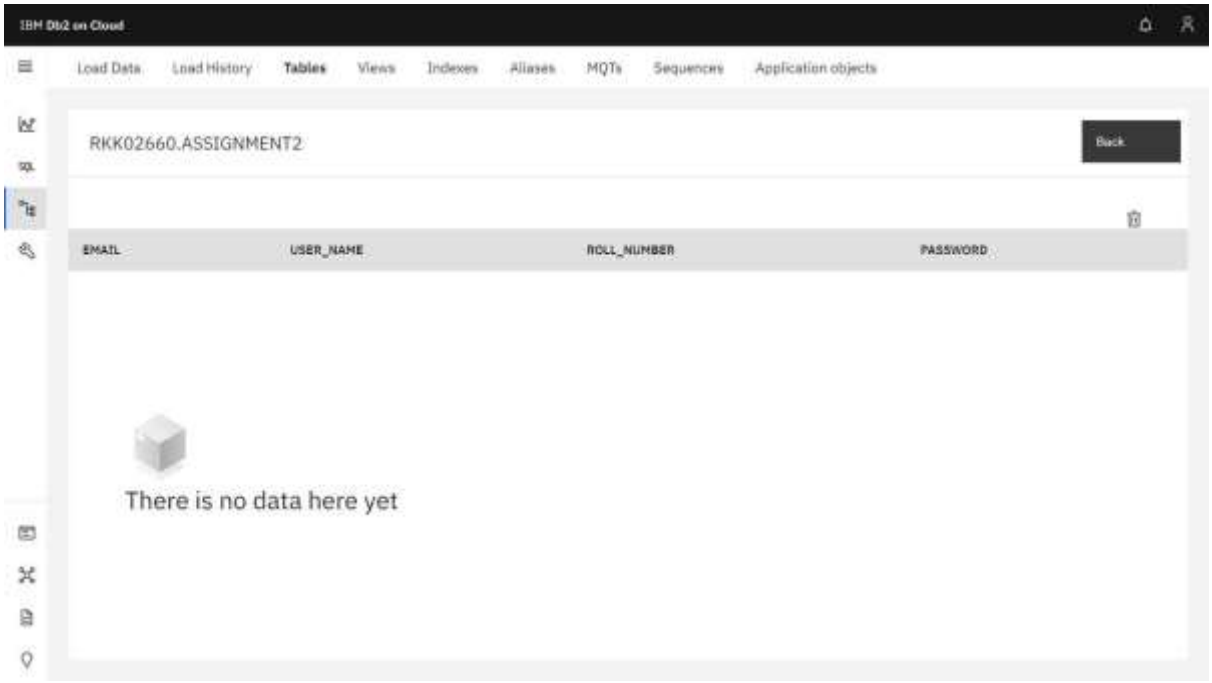


---------- 4.Perform UPDATE, DELETE Queries with user table


IBM Db2 on Cloud
Data objects
Saved objects
Filter objects
RKK02660
* Untitled - 1
Syntax assistant
Run all
1 UPDATE ASSIGNMENT2
2 SET ROLL_NUMBER='19IMT40',PASSWORD='HeroSanthosh'
3 WHERE USER_NAME='smartsriram';
History
Results
Find history
Script
Date
Status
Runtime
Untitled - 1
UPDATE ASSIGNMENT2 SET ROLL_NUMBER='19IMT40',PASSWORD='HeroSanthosh'


IBM Db2 on Cloud
Load Data
Load History
Tables
Views
Indexes
Aliases
MQTs
Sequences
Application objects
RKK02660.ASSIGNMENT2
Back
Export to CSV
EMAIL
USER_NAME
ROLL_NUMBER
PASSWORD
smartsriram
19IMT40
HeroSanthosh





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5. Connect python code to db2.
6. 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

login.html: <html> <body>

```
                <form action = "http://localhost:3899/login" method = "post">
                        <h1>
                        Enter user Name:<input type = "text" name =
"username" required /><br><br>
                        Enter Password:<input type = "text" name =
"password"/><br><br>
   <input type = "submit" value = "SUBMIT" name="submit"/><br><br>
                        <a href="/regis">Click here to register</a>
                    </h1>
                </form>
        </center>
</body>
```

```
</html>
```

register.html:

```
<html>
<body>
                    <center>
                                                        <form action
=
"http://localhost:3899/register" method = "post">
                                <h1>
                            Enter user Name:<input type = "text" name =
"username" required /><br><br>
                                                            Enter
Email:<input type =
"text" name =
"email"/><br><br>
                                Enter Password:<input type = "text"
name =  "password"/><br><br>
                            <input type = "submit" value = "SUBMIT"/>
                        </h1>
                            </form>
                    </center>
</body>
</html>
```

welcome.html:

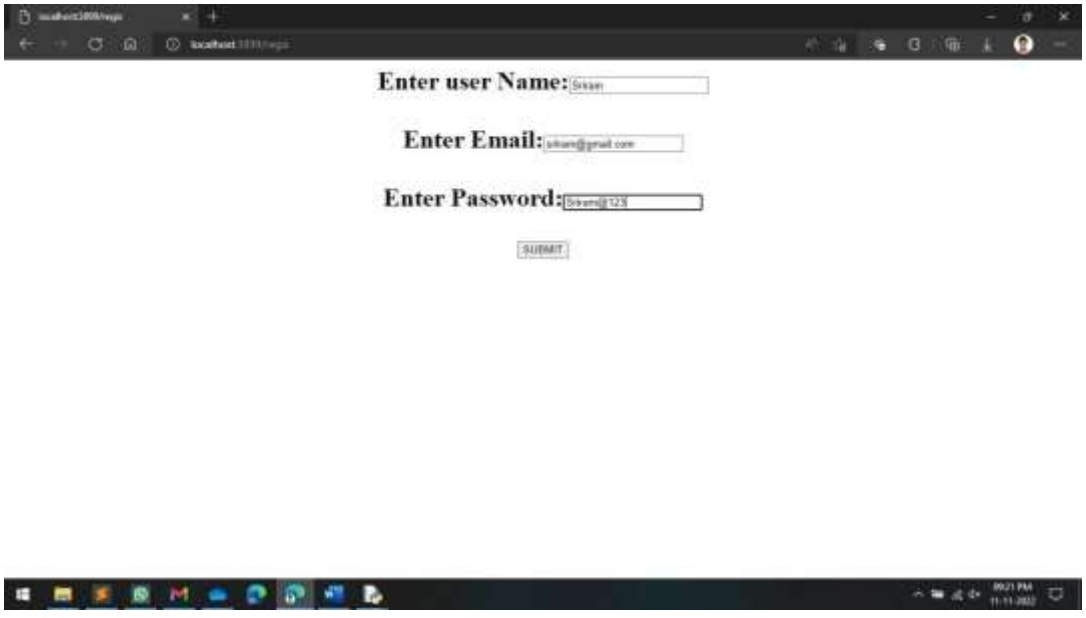
```
<html>
<body>
                    <center>
            <img src="https://img.freepik.com/free-vector/flatdesigncolorful-characters-welcoming_23-2148271988.jpg?w=740&t=st=1668096317~exp=1668096917~hmac=da88964b5c0b6a1b878a26c38ba3a87abc6583421a79f1d4edac4abb2d71062e">
                    </center>
</body>
</html>
```

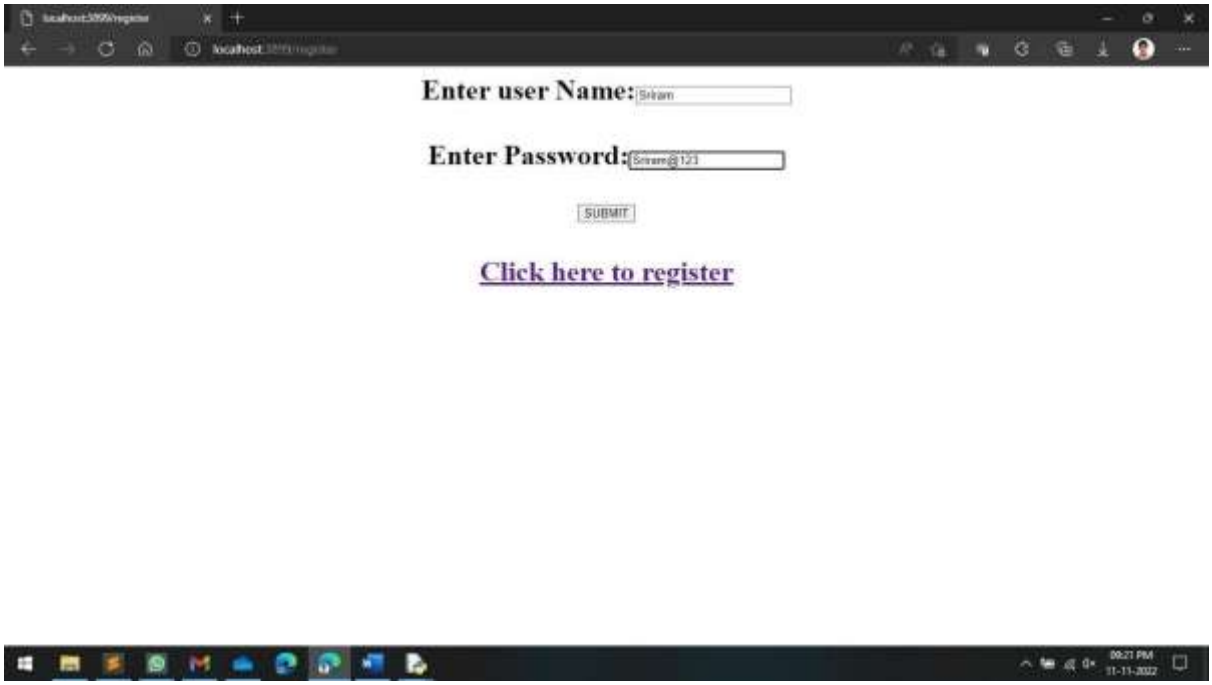
app.py:

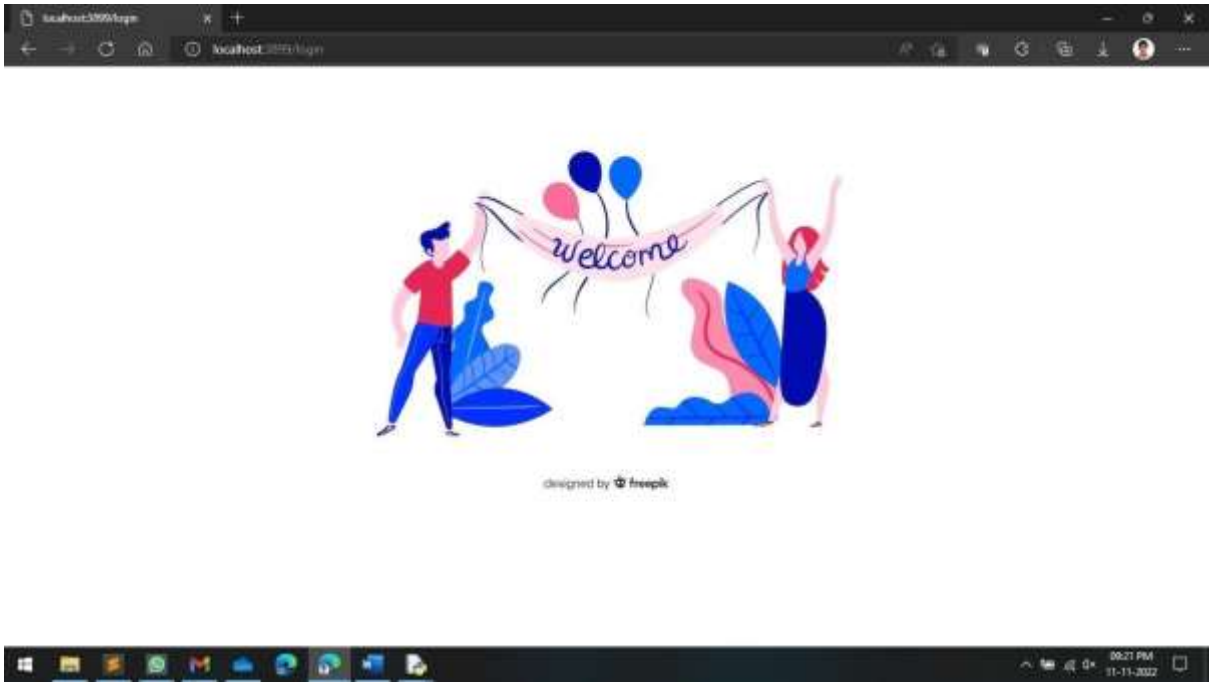
```
from flask import Flask,render_template,request,redirect,url_for,session import ibm_db
import re
app=Flask(__name__) app.secret_key
= 'abc'
conn=ibm_db.connect("DATABASE=bludb;HOSTNAME=ba99a9e6-d59e-4883-8fc0d6a8c9f7a08f.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=31321;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=**********;PWD=**********",'','') #Answer for Question(5)

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

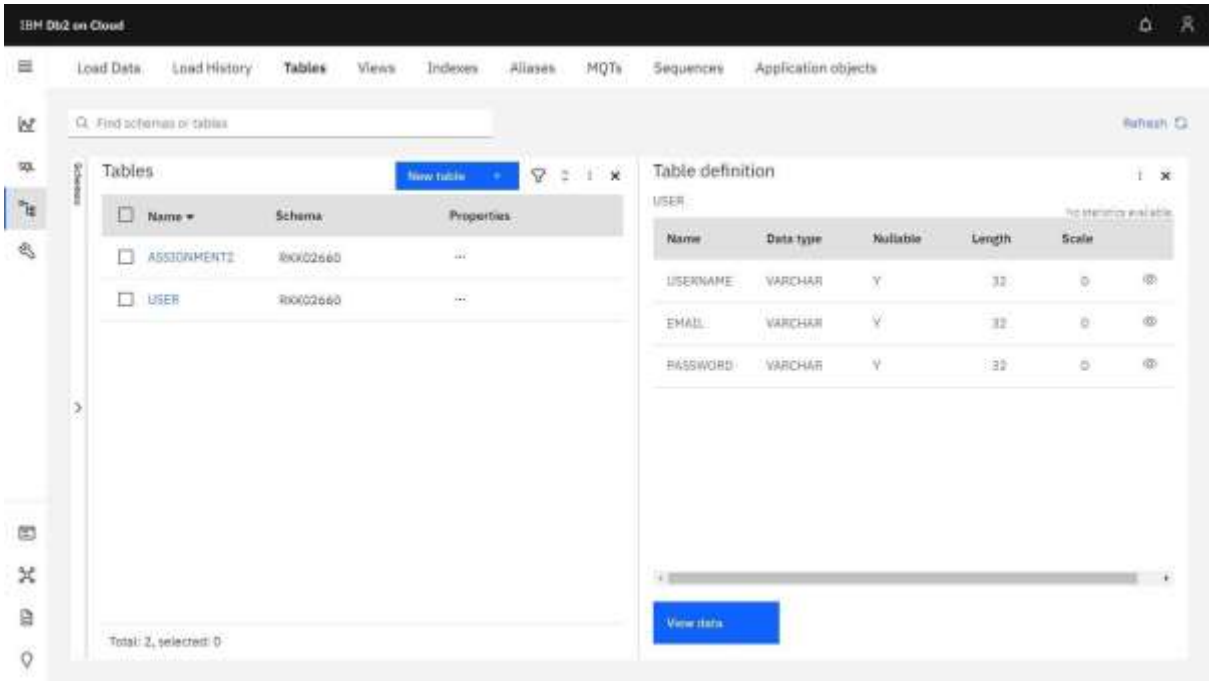
```
def home():
    return render_template('login.html')

@app.route('/regis')
def regis():
    return render_template('register.html')

@app.route('/login',methods=['GET','POST'])
def login():
    global userid
    msg=''
    if request.method=='POST':
        username = request.form['username']
        password = request.form['password']
        sql = "SELECT * FROM User WHERE username = ? AND password = ?"
        stmt = ibm_db.prepare(conn,sql)
        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:
            msg='Logged in successfully!'
            return render_template('welcome.html',msg=msg)
        else:
            return render_template('login.html')

@app.route('/register',methods=['GET','POST'])
def register():
    if request.method=='POST':
        username = request.form['username']
        email = request.form['email']
        password = request.form['password']
        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:
            return '{}'.format("Account already exist!")
        else:
```

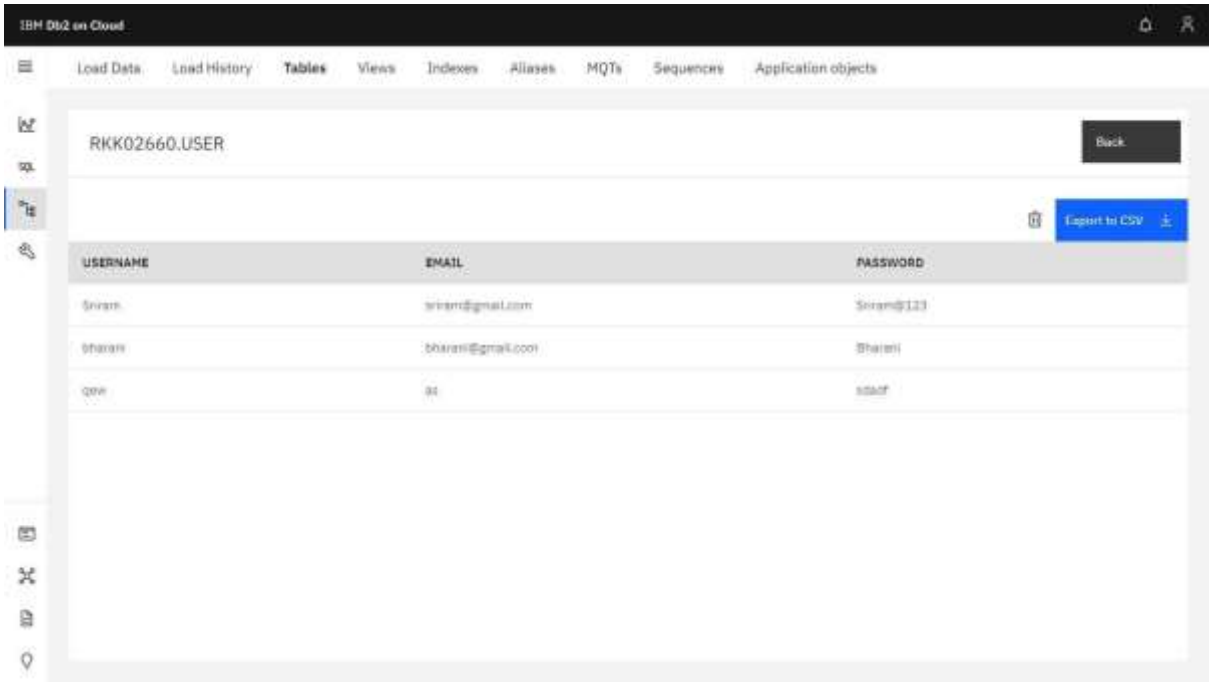
```
            insert_sql="INSERT INTO user VALUES(?, ?,
?)"             prep_stmt=ibm_db.prepare(conn,insert_sql)
ibm_db.bind_param(prep_stmt,1,username)
ibm_db.bind_param(prep_stmt,2,email)
ibm_db.bind_param(prep_stmt,3,password)
ibm_db.execute(prep_stmt)             msg="You have
successfully registered"             return render_template('login.html',msg=msg)

if __name__ == '__main__':
app.run('127.0.0.1',3899)
```




Enter user Name:
Sriram
Enter Password:
Sriram@123
SUBMIT
Click here to register


Welcome
designed by freepik


IBM Db2 on Cloud
Load Data
Load History
Tables
Views
Indexes
Aliases
MQTs
Sequences
Application objects
Find schemas or tables
Refresh
Tables
New table
Name
Schema
Properties
ASSIGNMENT2
RKK02660
USER
RKK02660
Total: 2, selected: 0
Table definition
USER
Name
Data type
Nullable
Length
Scale
USERNAME
VARCHAR
Y
32
0
EMAIL
VARCHAR
Y
32
0
PASSWORD
VARCHAR
Y
32
0
View data


IBM Db2 on Cloud
Load Data
Load History
Tables
Views
Indexes
Aliases
MQTs
Sequences
Application objects
RKK02660.USER
Back
Export to CSV
USERNAME
EMAIL
PASSWORD
