Assignment-2

Project Domain	Cloud Application Development
Project Title	News Tracker Application
Team ID	PNT2022TMID44401
Name	KISHORE S
Roll No	731119205016
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)
```

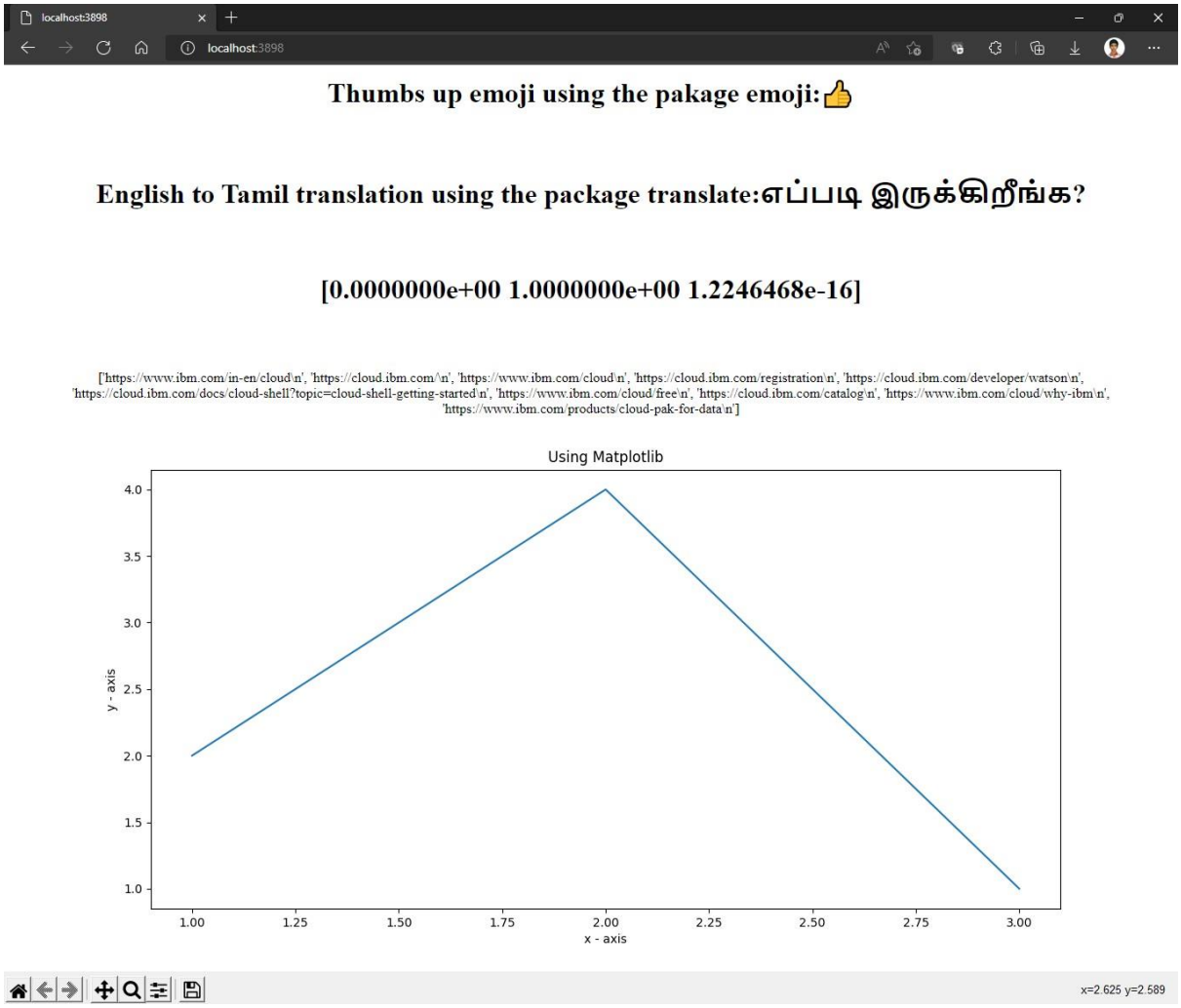
2.Develop a flask program which should contain at least 5 packages used from pypi.org.

Packages used:

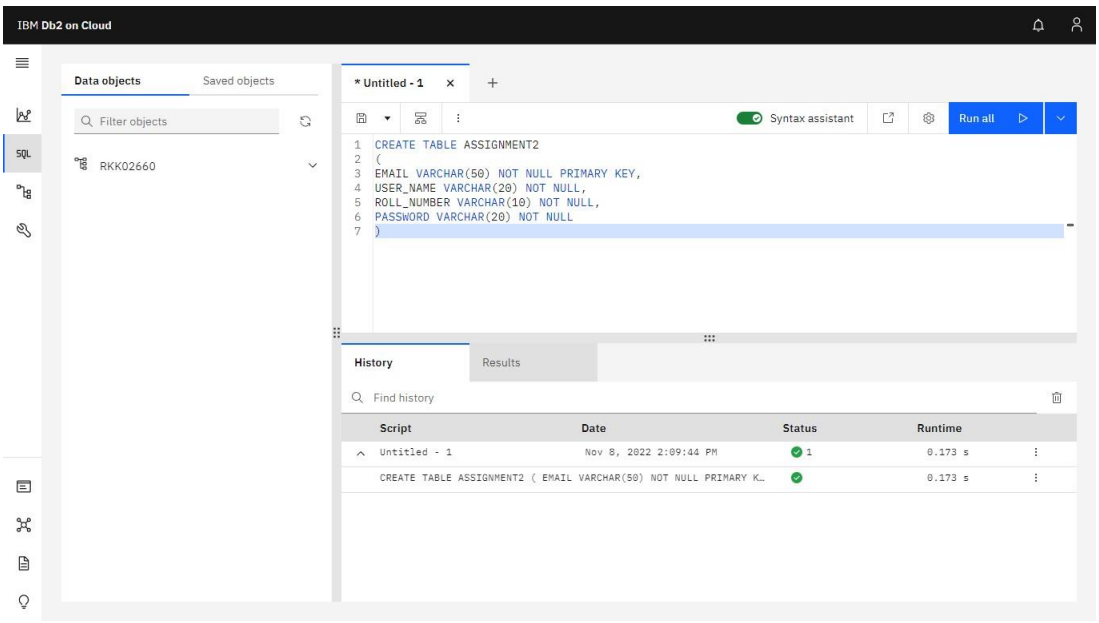
Flask, emoji, matplotlib, numpy, translate, googlesearch

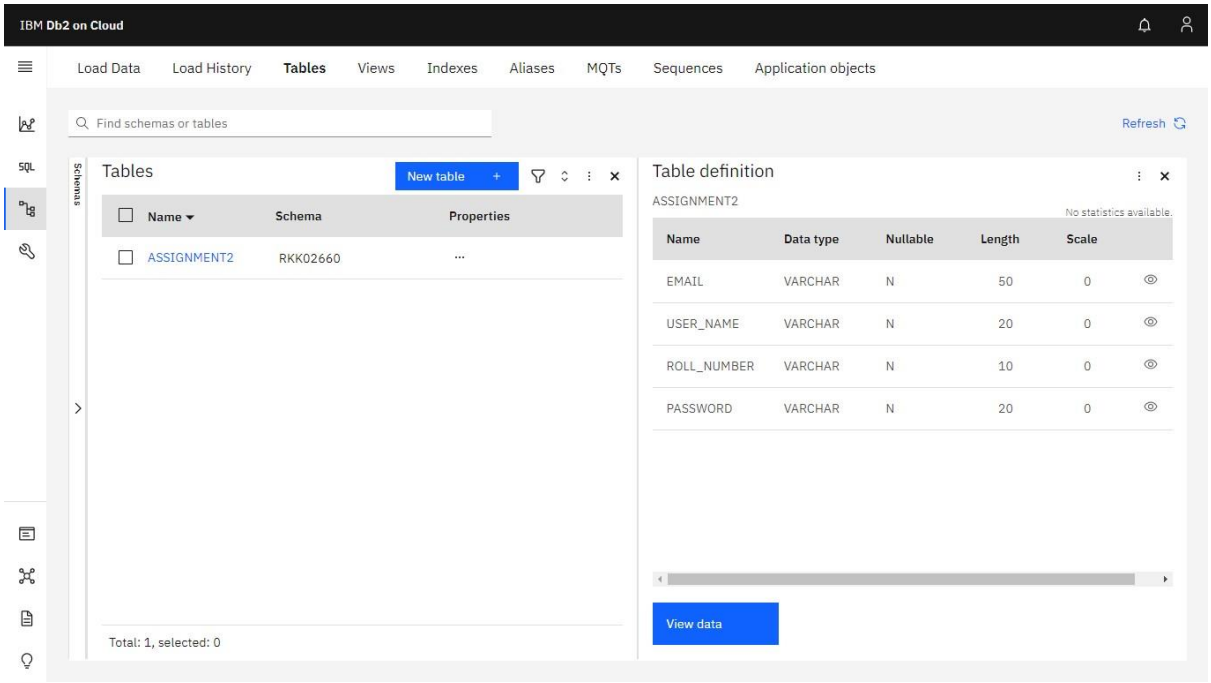
Packages.py:

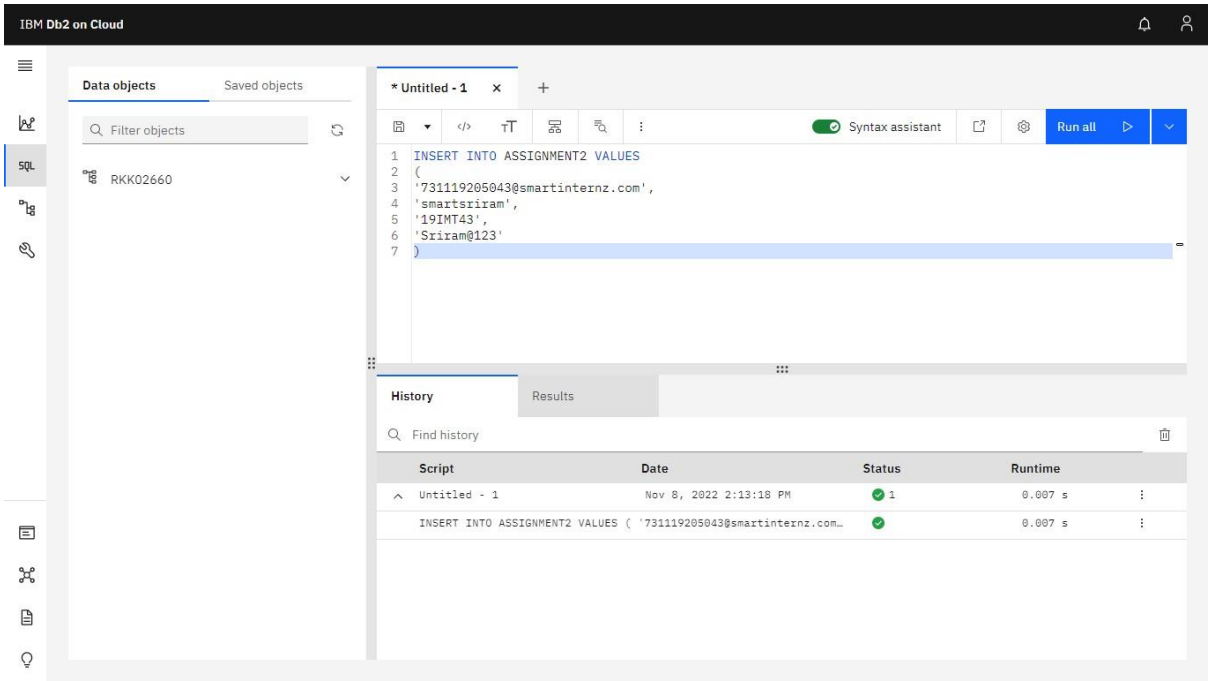
```
from flask import Flask from
emoji import emojize import
matplotlib.pyplot as plt import
numpy as np from translate
import Translator
from googlesearch import search

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)
```

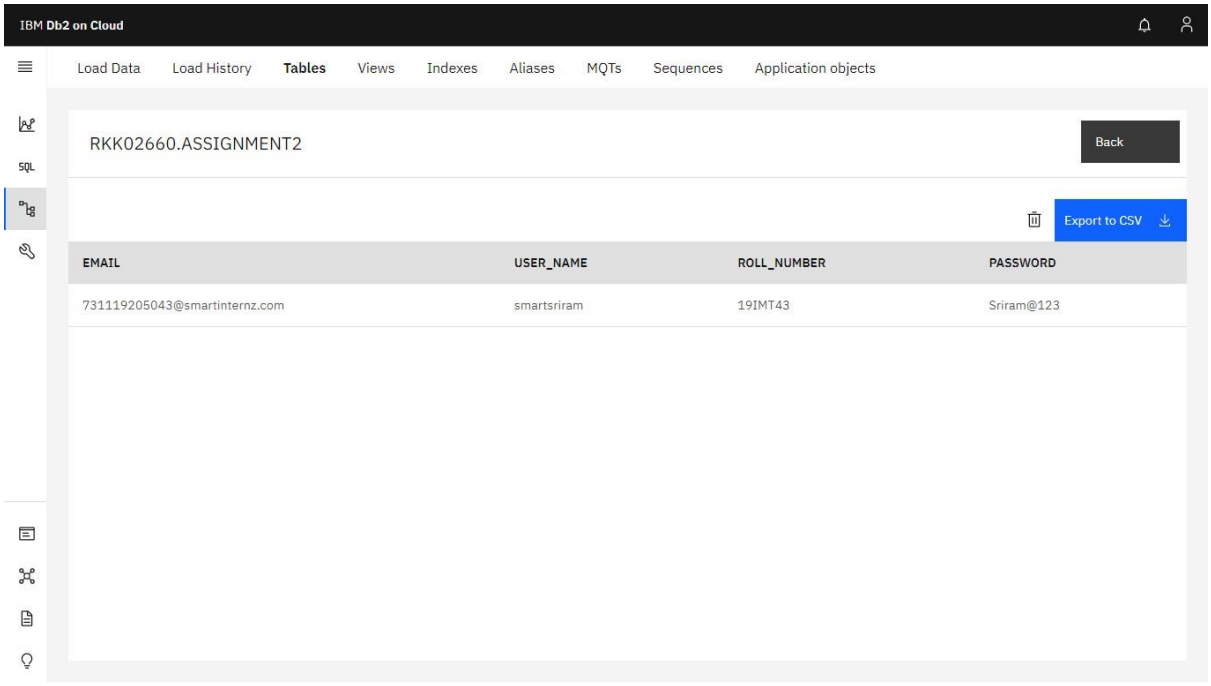


3.Create User table with user with email, username, roll number, password.

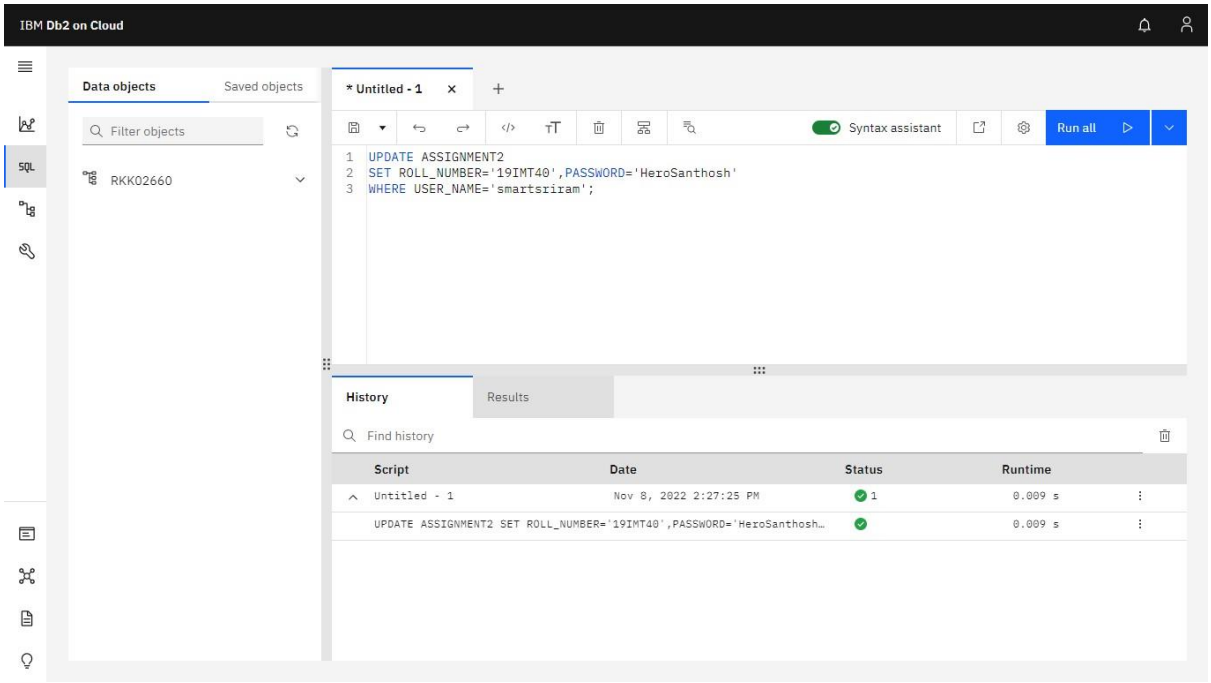


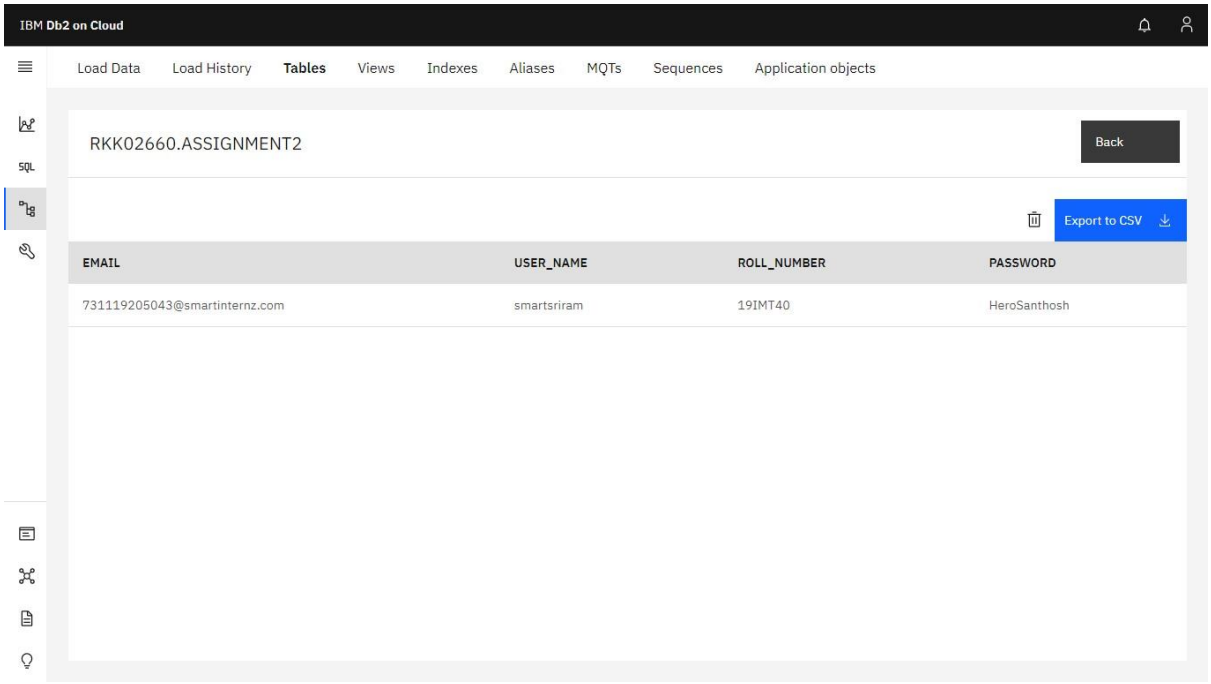

IBM Db2 on Cloud
Load Data
Load History
Tables
Views
Indexes
Aliases
MQTs
Sequences
Application objects
Find schemas or tables
Refresh
Schemas
Tables
New table
Name
Schema
Properties
ASSIGNMENT2
RKK02660
Total: 1, selected: 0
Table definition
ASSIGNMENT2
No statistics available.
Name
Data type
Nullable
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

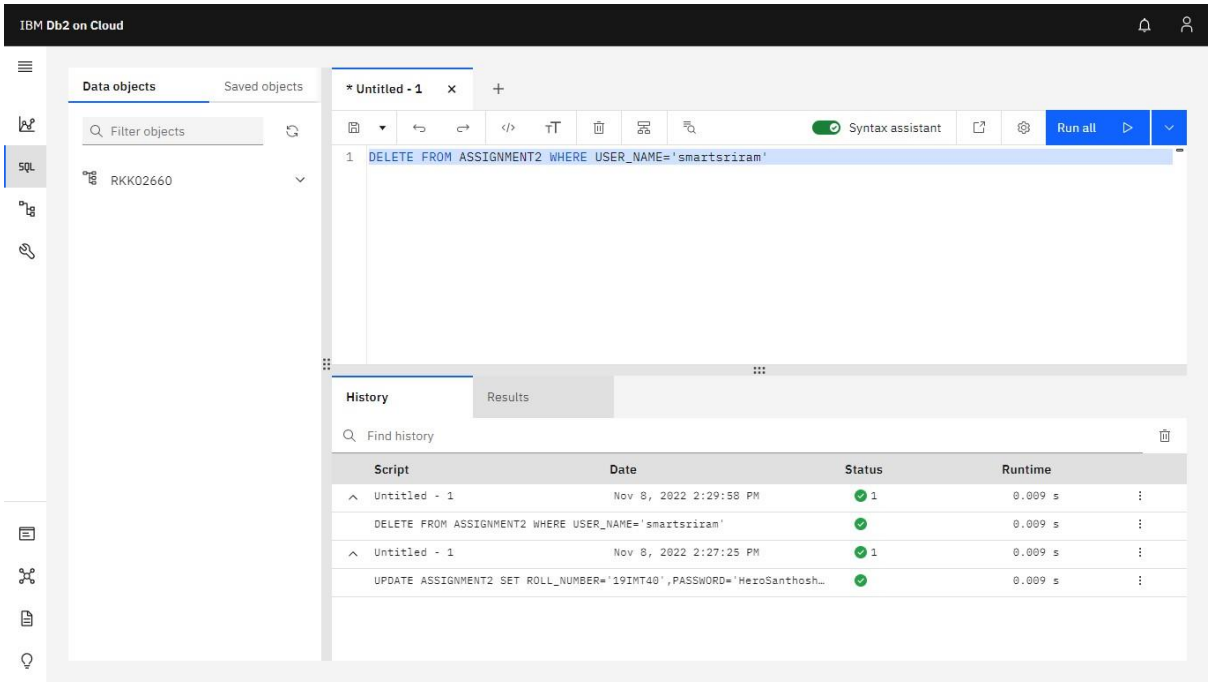

IBM Db2 on Cloud
Data objects
Saved objects
Filter objects
RKK02660
* Untitled - 1
Syntax assistant
Run all
INSERT INTO ASSIGNMENT2 VALUES
(
'731119205043@smartinternz.com',
'smartsriram',
'19IMT43',
'Sriram@123'
)
History
Results
Find history
Script
Date
Status
Runtime
Untitled - 1
Nov 8, 2022 2:13:18 PM
1
0.007 s
INSERT INTO ASSIGNMENT2 VALUES ('731119205043@smartinternz.com…
0.007 s

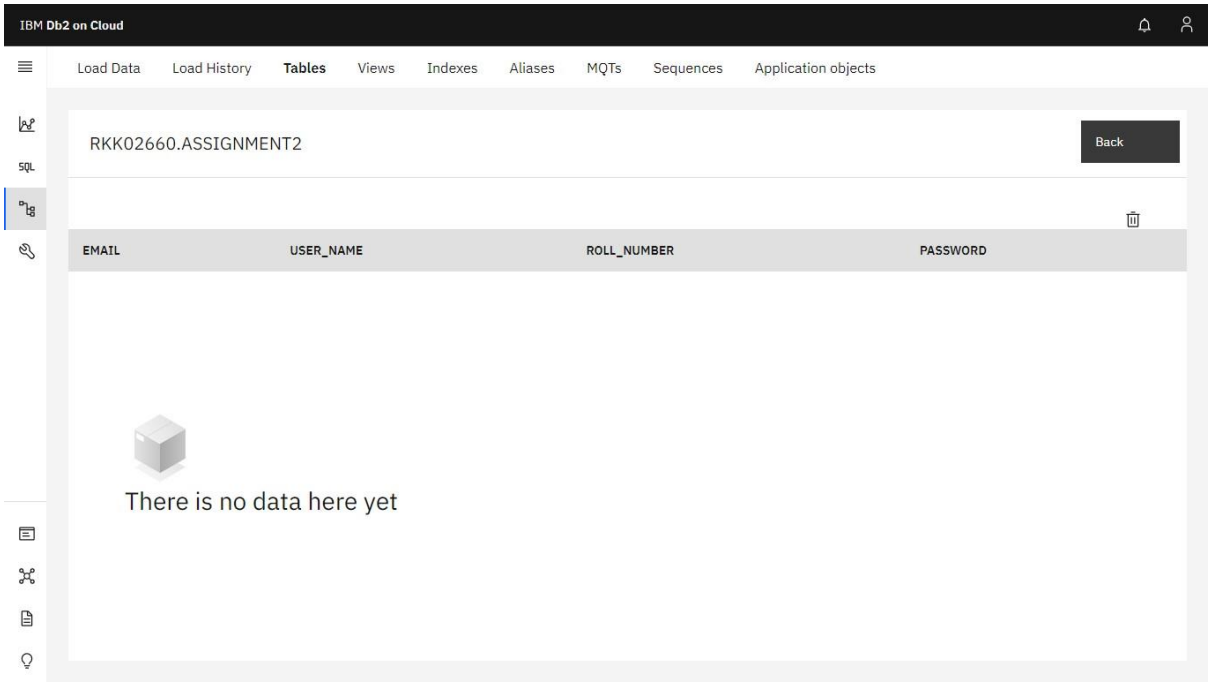


4.Perform UPDATE, DELETE Queries with user table




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
731119205043@smartinternz.com
smartsriram
19IMT40
HeroSanthosh


IBM Db2 on Cloud
Data objects
Saved objects
Filter objects
RKK02660
* Untitled - 1
Syntax assistant
Run all
1 DELETE FROM ASSIGNMENT2 WHERE USER_NAME='smartsriram'
History
Results
Find history
Script
Date
Status
Runtime
Untitled - 1
Nov 8, 2022 2:29:58 PM
1
0.009 s
DELETE FROM ASSIGNMENT2 WHERE USER_NAME='smartsriram'
0.009 s
Untitled - 1
Nov 8, 2022 2:27:25 PM
1
0.009 s
UPDATE ASSIGNMENT2 SET ROLL_NUMBER='19IMT40',PASSWORD='HeroSanthosh…
0.009 s



---

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>
        <center>
                <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:

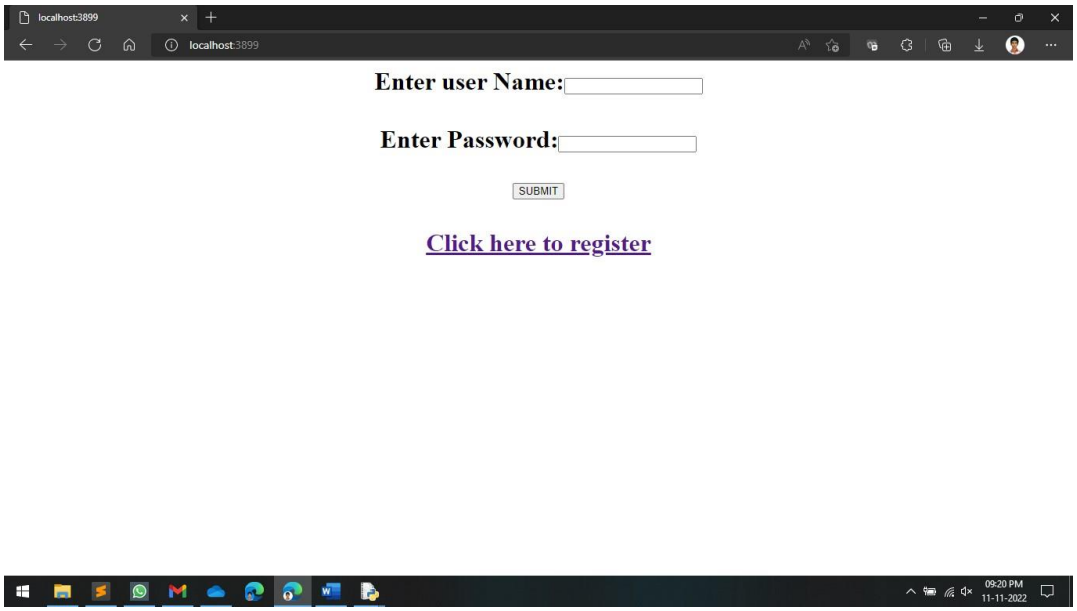
```
<html>
<body>
        <center>
        <img src="https://img.freepik.com/free-vector/flat-
designcolorful-characters-welcoming_23-
2148271988.jpg?w=740&t=st=1668096317~exp=1668096917~hmac=da8896
4b5c0b6a1b878a26c38ba3a87abc6583421a79f1d4edac4abb2d71062e">
        </center>
</body>
</html>
```

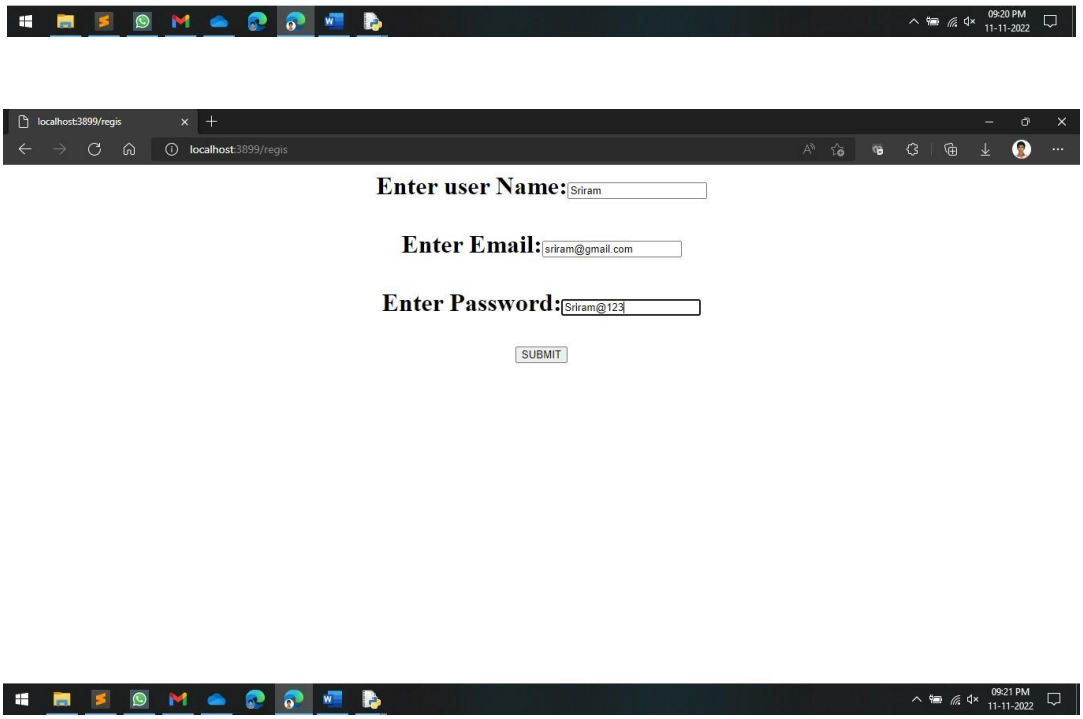
app.py:

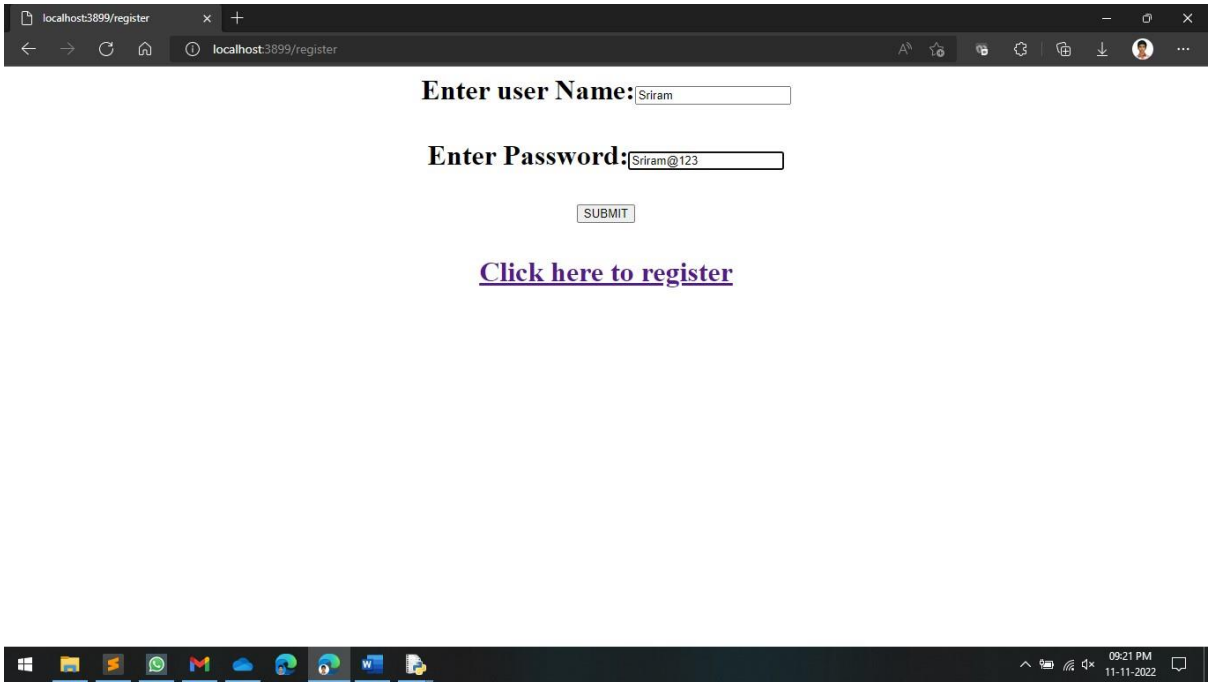
```
from flask import Flask,render_template,request,redirect,url_for,session
import ibm_db
import re
app=Flask(__name__) app.secret_key
= 'abc'
conn=ibm_db.connect("DATABASE=bludb;HOSTNAME=ba99a9e6-d59e-
4883-
8fc0d6a8c9f7a08f.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=3
132
1;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=*
**********;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:
```

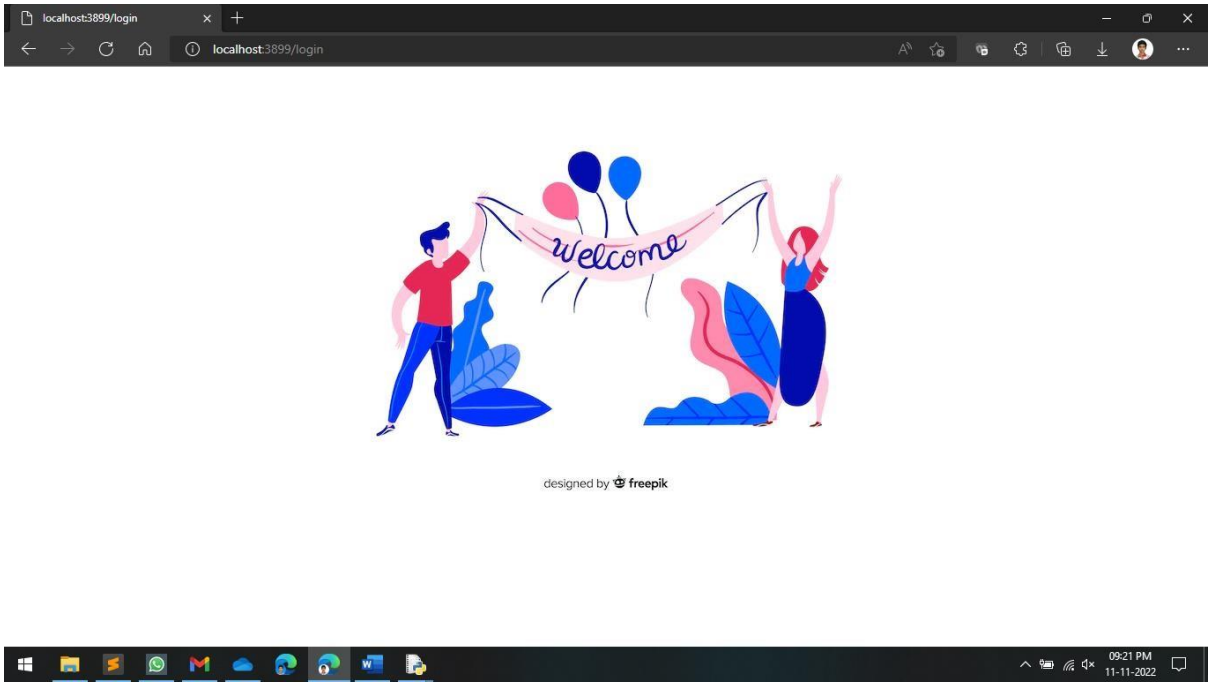
```
            insert_sql="INSERT INTO user VALUES(?, ?,
?)"             prep_stmt=ibm_db.prepare(conn,insert_sql)
ibm_db.bind_param(prep_stmt,1,username)
ibm_db.bind_param(prep_stmt,2,email)
ibm_db.bind_param(prep_stmt,3,password)
ibm_db.execute(prep_stmt)             msg="You have
successfully registered"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

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



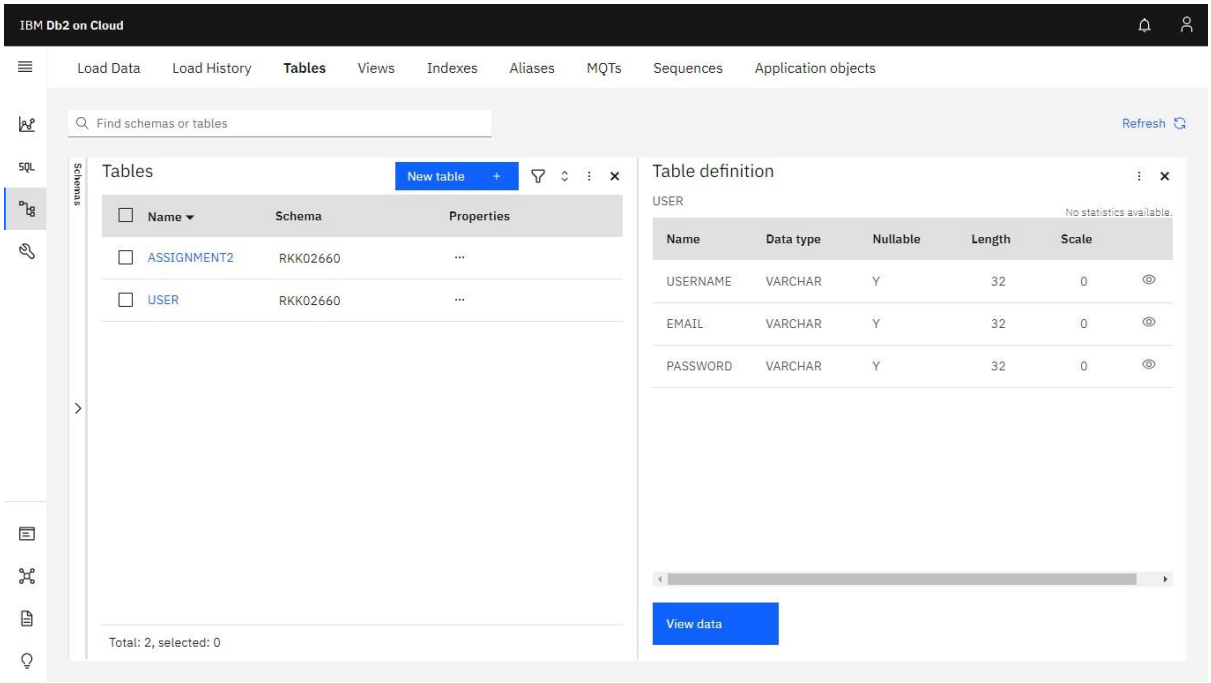


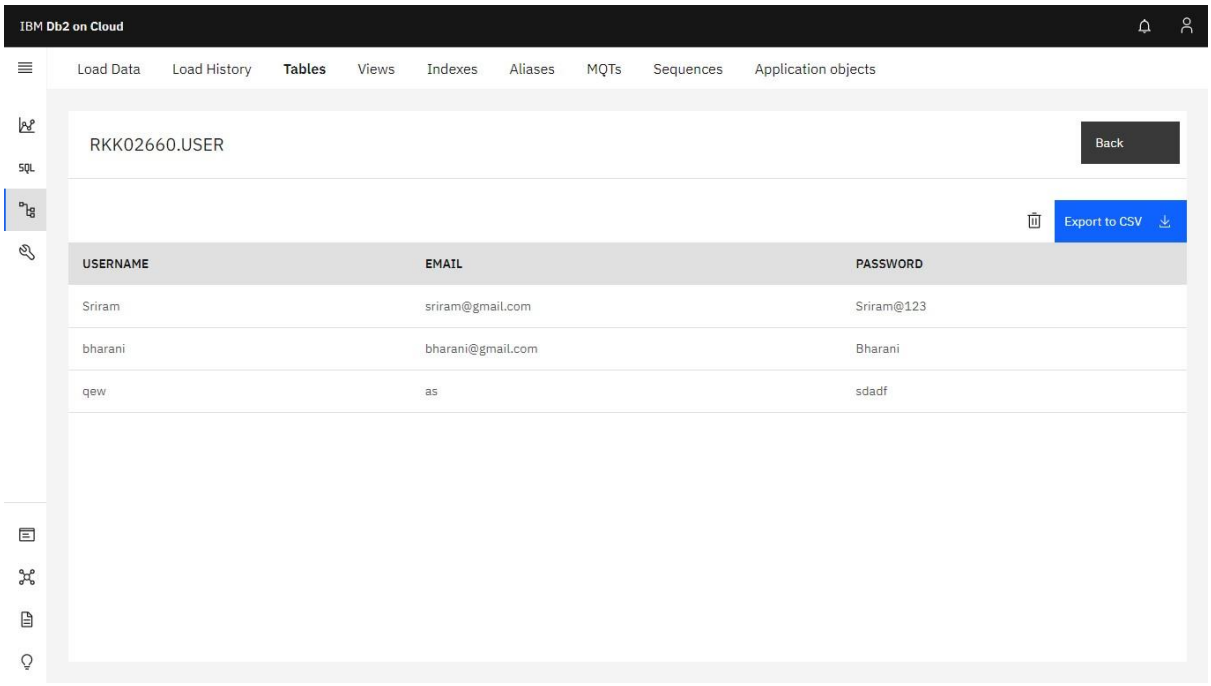

localhost:3899/register
localhost:3899/register
Enter user Name:
Sriram
Enter Password:
Sriram@123
SUBMIT
Click here to register

09:21 PM
11-11-2022


localhost:3899/login
localhost:3899/login
Welcome
designed by freepik

09:21 PM
11-11-2022


IBM Db2 on Cloud
Load Data
Load History
Tables
Views
Indexes
Aliases
MQTs
Sequences
Application objects
Find schemas or tables
Refresh
Schemas
Tables
New table
Name
Schema
Properties
ASSIGNMENT2
RKK02660
USER
RKK02660
Total: 2, selected: 0
Table definition
USER
No statistics available.
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
Sriram
sriram@gmail.com
Sriram@123
bharani
bharani@gmail.com
Bharani
qew
as
sdadf