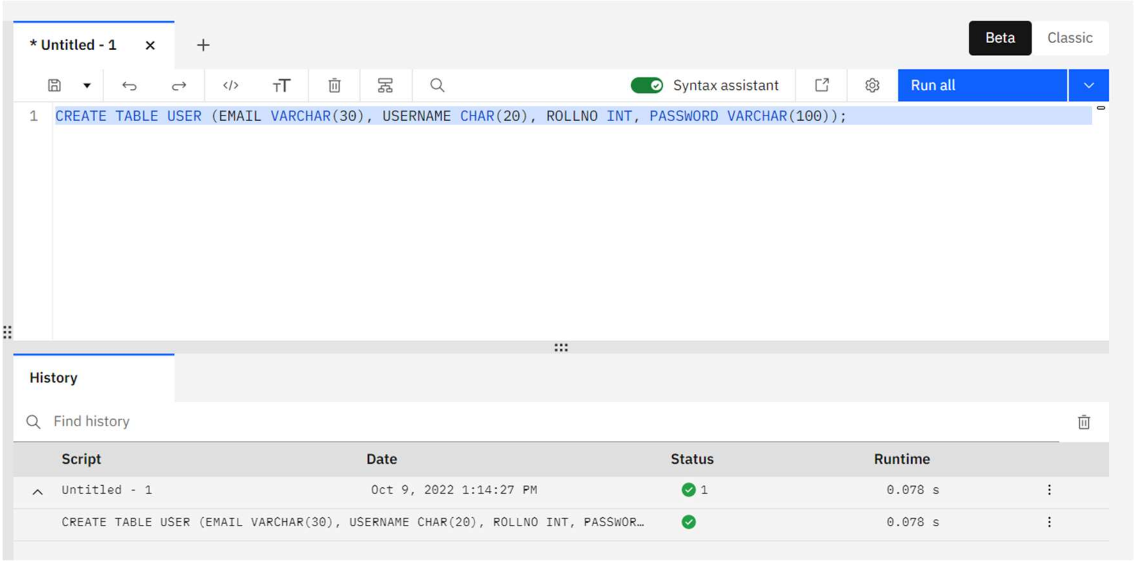
Assignment -2

Connect with Database Assignment

Assignment Date	09 October 2022
Student Name	S.Dineshwaran
Student Roll Number	621319104014
Maximum Marks	2 Marks

Question-1:

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

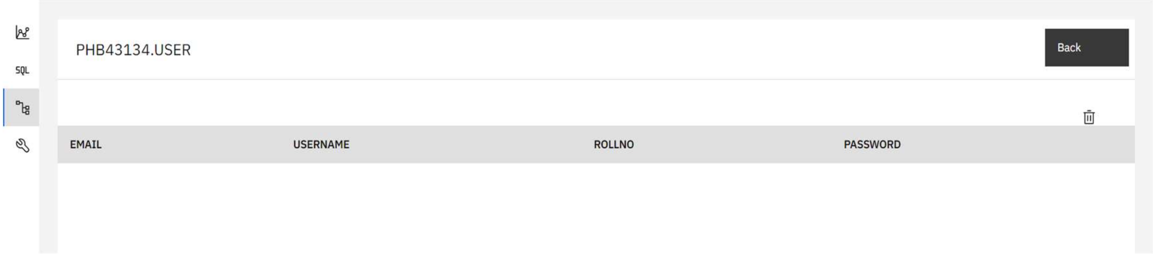


```
CREATE TABLE USER (EMAIL VARCHAR(30), USERNAME CHAR(20), ROLLNO INT, PASSWORD VARCHAR(100));
```

History

Find history

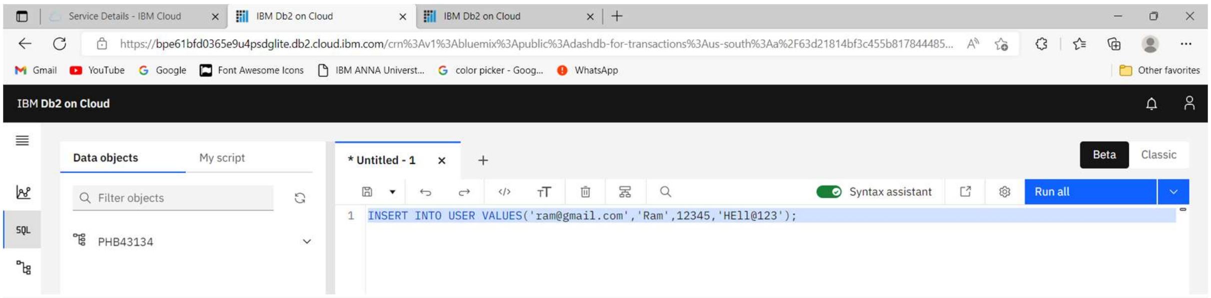
Script	Date	Status	Runtime
Untitled - 1	Oct 9, 2022 1:14:27 PM	✓ 1	0.078 s
CREATE TABLE USER (EMAIL VARCHAR(30), USERNAME CHAR(20), ROLLNO INT, PASSWOR…		✓	0.078 s



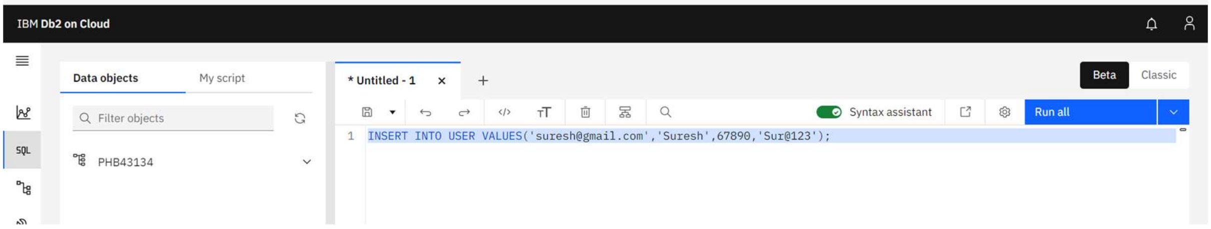
PHB43134.USER

EMAIL	USERNAME	ROLLNO	PASSWORD

2.Perform UPDATE, DELETE Queries with User table

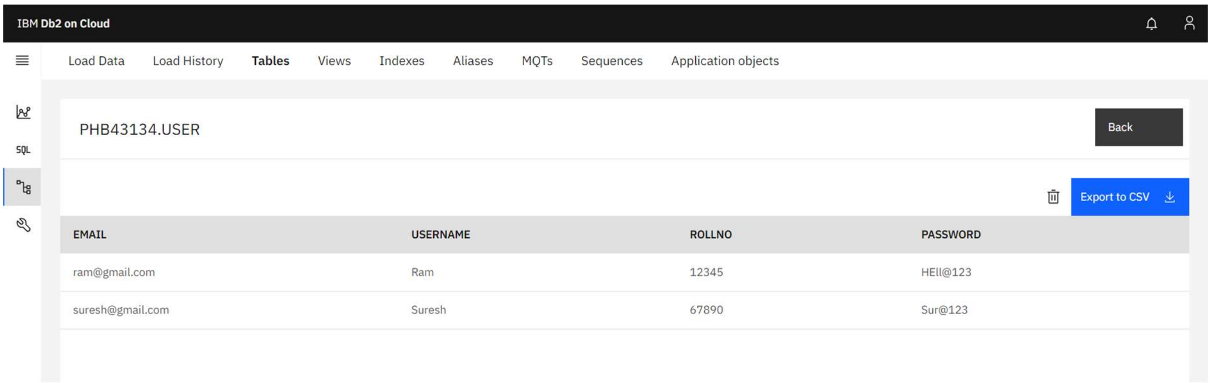


```
INSERT INTO USER VALUES('ram@gmail.com','Ram',12345,'HEll@123');
```



```
INSERT INTO USER VALUES('suresh@gmail.com','Suresh',67890,'Sur@123');
```

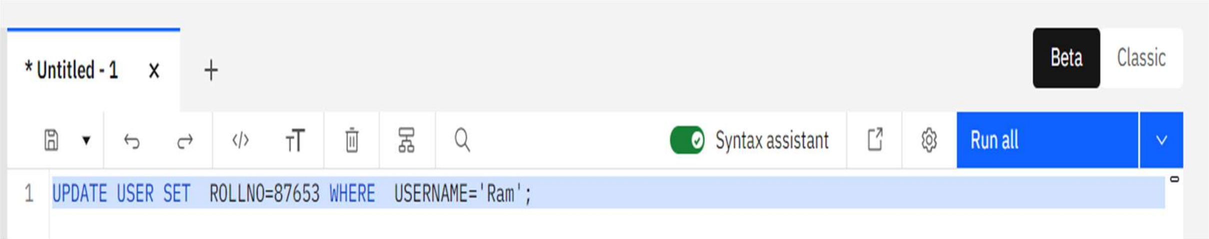
Table View:



PHB43134.USER

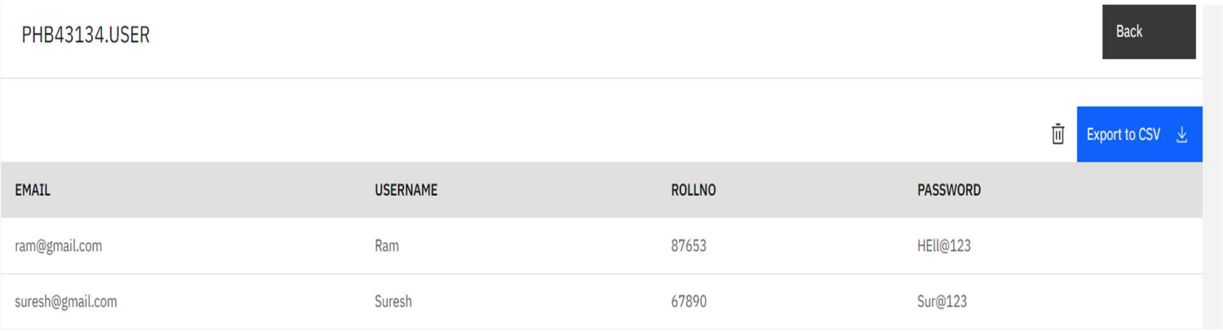
EMAIL	USERNAME	ROLLNO	PASSWORD
ram@gmail.com	Ram	12345	HEll@123
suresh@gmail.com	Suresh	67890	Sur@123

UPDATE:



```
UPDATE USER SET  ROLLNO=87653 WHERE  USERNAME='Ram';
```

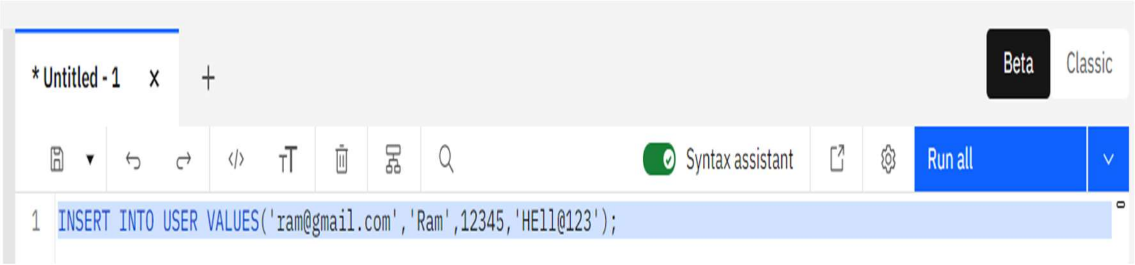
Table View:



PHB43134.USER

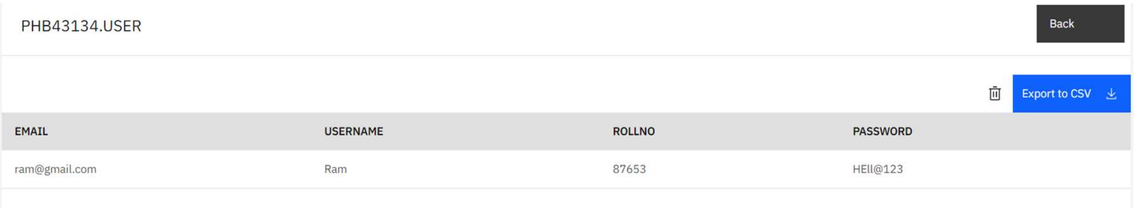
EMAIL	USERNAME	ROLLNO	PASSWORD
ram@gmail.com	Ram	87653	HEll@123
suresh@gmail.com	Suresh	67890	Sur@123

DELETE:



```
INSERT INTO USER VALUES('ram@gmail.com','Ram',12345,'HEll@123');
```

TABLE View:



PHB43134.USER

EMAIL	USERNAME	ROLLNO	PASSWORD
ram@gmail.com	Ram	87653	HEll@123

3. Connect python with db2.

Solution:

```
import ibm_db

conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=54a2f15b-5c0f-46df-8954-7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32733;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;PROTOCOL=TCPIP;UID=phb43134;PWD=mTTnIE45Raj9A0rr",'','')
```

4.Create a flask app with the registration page. Login page and the 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 so the welcome page.

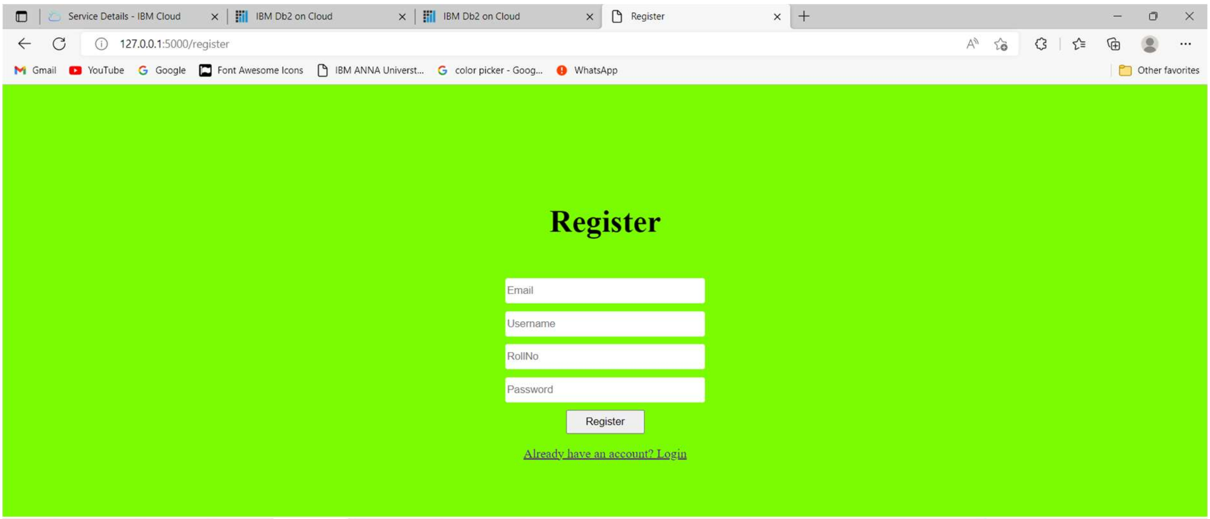
Solution:

app.py

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

import ibm_db
import bcrypt
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=;PORT=;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=;PWD=",'','')

# url_for('static', filename='style.css')

app = Flask(__name__)
app.secret_key = 'C21FGSBAPOK43K5VSIDFB2'

@app.route("/",methods=['GET'])
def home():
    if 'email' not in session:
      return redirect(url_for('login'))
    return render_template('home.html',name='Home')

@app.route("/register",methods=['GET','POST'])
```

```
def register():
  if request.method == 'POST':
    email = request.form['email']
    username = request.form['username']
    rollNo = request.form['rollNo']
    password = request.form['password']

    if not email or not username or not rollNo or not password:
      return render_template('register.html',error='Please fill all fields')

    hash=bcrypt.hashpw(password.encode('utf-8'),bcrypt.gensalt())

    query = "SELECT * FROM USER WHERE email=? OR rollNo=?"
    stmt = ibm_db.prepare(conn, query)
    ibm_db.bind_param(stmt,1,email)
    ibm_db.bind_param(stmt,2,rollNo)
    ibm_db.execute(stmt)
    isUser = ibm_db.fetch_assoc(stmt)

    if not isUser:
      insert_sql = "INSERT INTO User(username,email,PASSWORD,rollNo) 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, hash)
      ibm_db.bind_param(prep_stmt, 4, rollNo)
      ibm_db.execute(prep_stmt)
      return render_template('register.html',success="You can login")
    else:
      return render_template('register.html',error='Invalid Credentials')

  return render_template('register.html',name='Home')

@app.route("/login",methods=['GET','POST'])
def login():
    if request.method == 'POST':
      email = request.form['email']
      password = request.form['password']

      if not email or not password:
        return render_template('login.html',error='Please fill all fields')
      query = "SELECT * FROM USER WHERE email=?"
      stmt = ibm_db.prepare(conn, query)
      ibm_db.bind_param(stmt,1,email)
      ibm_db.execute(stmt)
      isUser = ibm_db.fetch_assoc(stmt)
      print(isUser,password)
      if not isUser:
        return render_template('login.html',error='Invalid Credentials')

      isPasswordMatch = bcrypt.checkpw(password.encode('utf-8'),isUser['PASSWORD'].encode('utf-8'))

      if not isPasswordMatch:
        return render_template('login.html',error='Invalid Credentials')

      session['email'] = isUser['EMAIL']
      return redirect(url_for('home'))

    return render_template('login.html',name='Home')
@app.route('/logout')
def logout():
    session.pop('email', None)
    return redirect(url_for('login'))
```

OUTPUT:



Register

Email

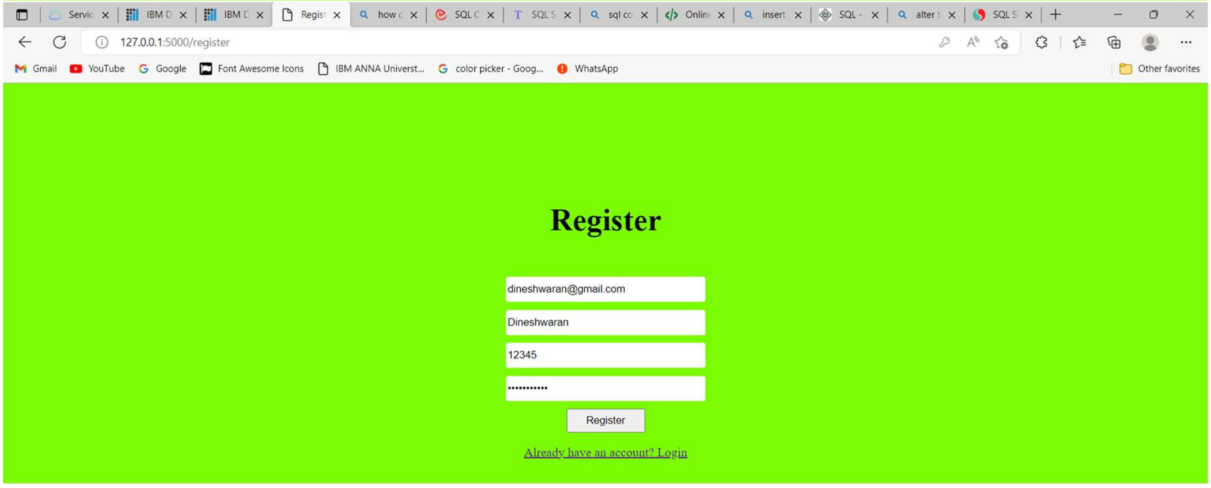
Username

RollNo

Password

Register

Already have an account? Login



Register

dineshwaran@gmail.com

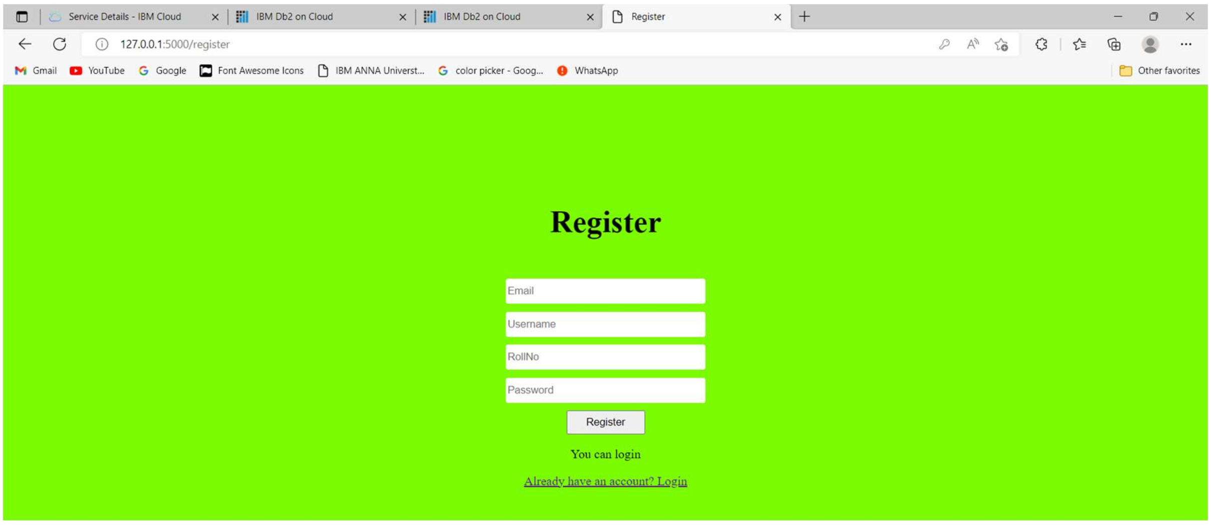
Dineshwaran

12345

•••••••••••

Register

Already have an account? Login



Register

Email

Username

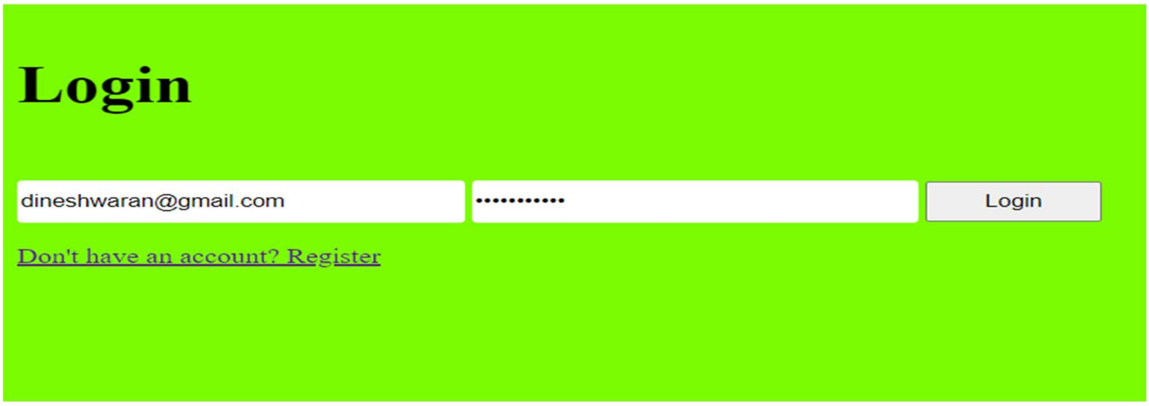
RollNo

Password

Register

You can login

Already have an account? Login



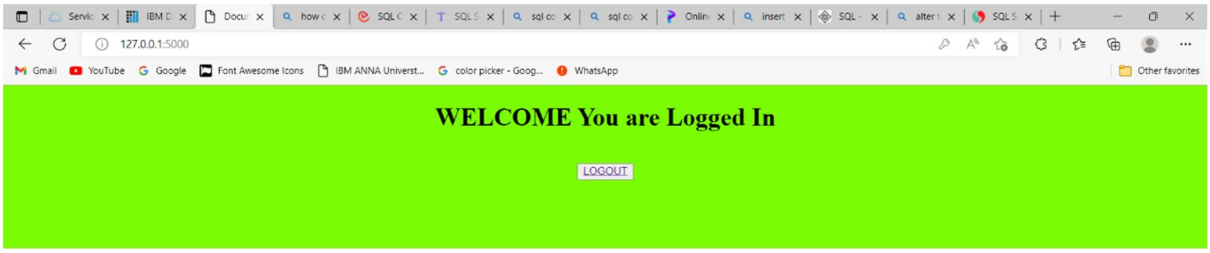
Login

dineshwaran@gmail.com

•••••••••••

Login

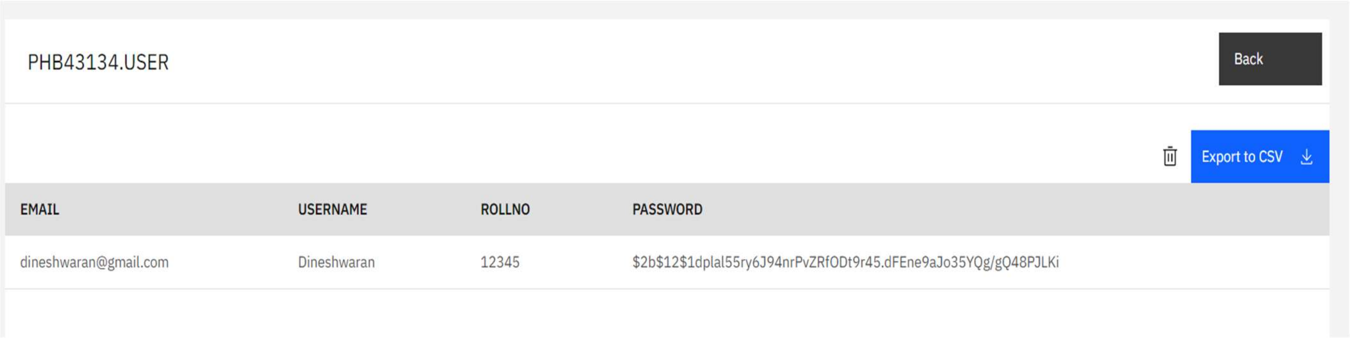
Don't have an account? Register



WELCOME You are Logged In

LOGOUT

Database:



PHB43134.USER

EMAIL	USERNAME	ROLLNO	PASSWORD
dineshwaran@gmail.com	Dineshwaran	12345	$2b$12$1dplal55ry6J94nrPvZRfODt9r45.dFEne9aJo35YQg/gQ48PJLKi