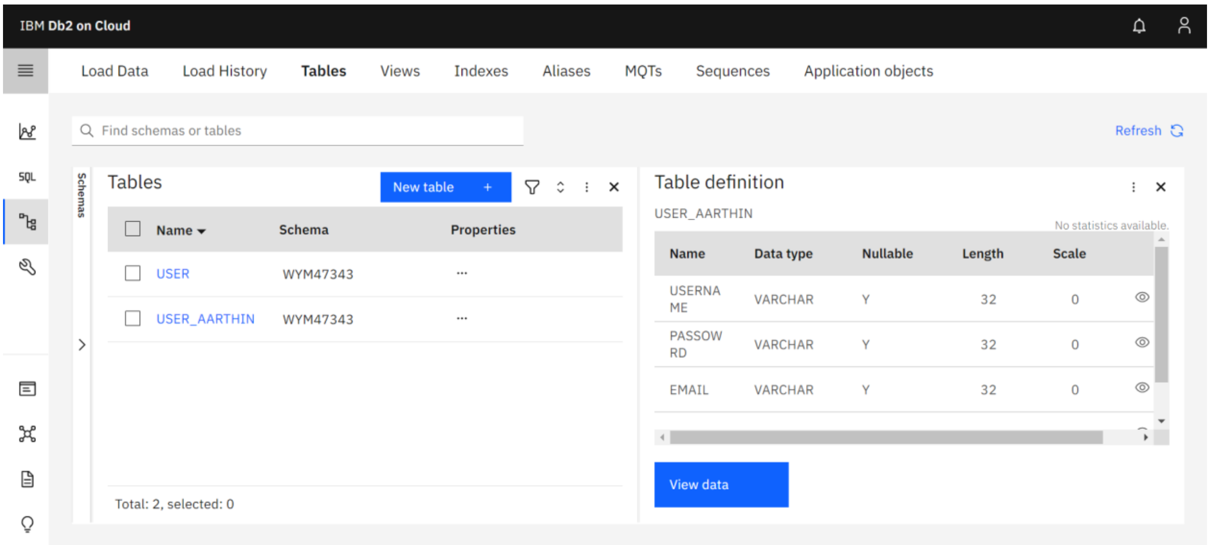
Assignment 2 – Personal Expense Tracker

Name: Aarthi N

RollNo: 195001002

Creation of table:



Tables

Name	Schema	Properties
□ USER	WYM47343	···
□ USER_AARTHIN	WYM47343	···

Total: 2, selected: 0

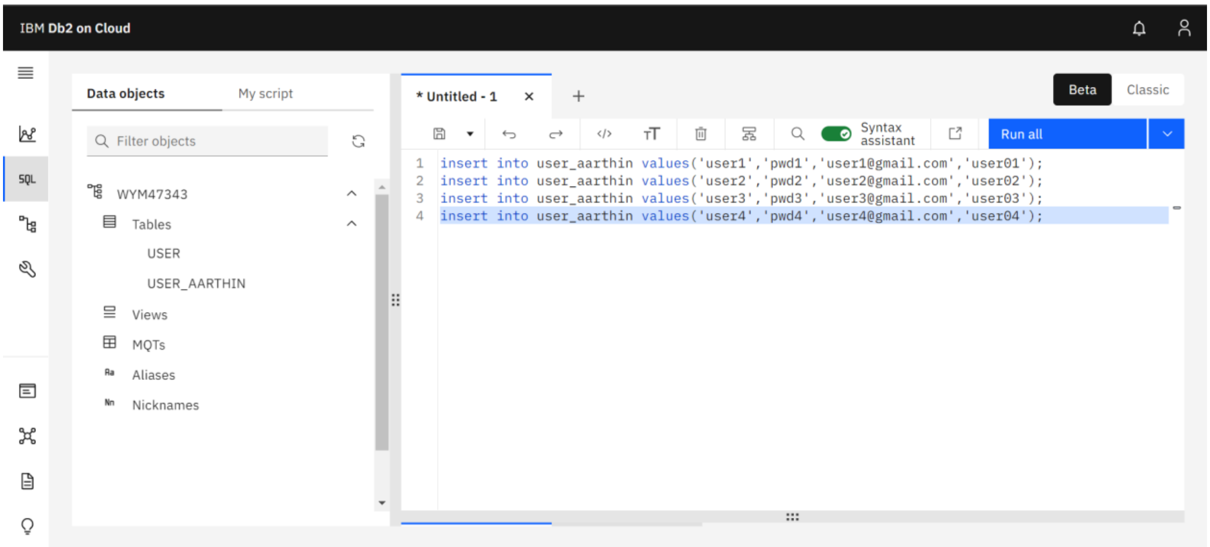
Table definition

USER_AARTHIN

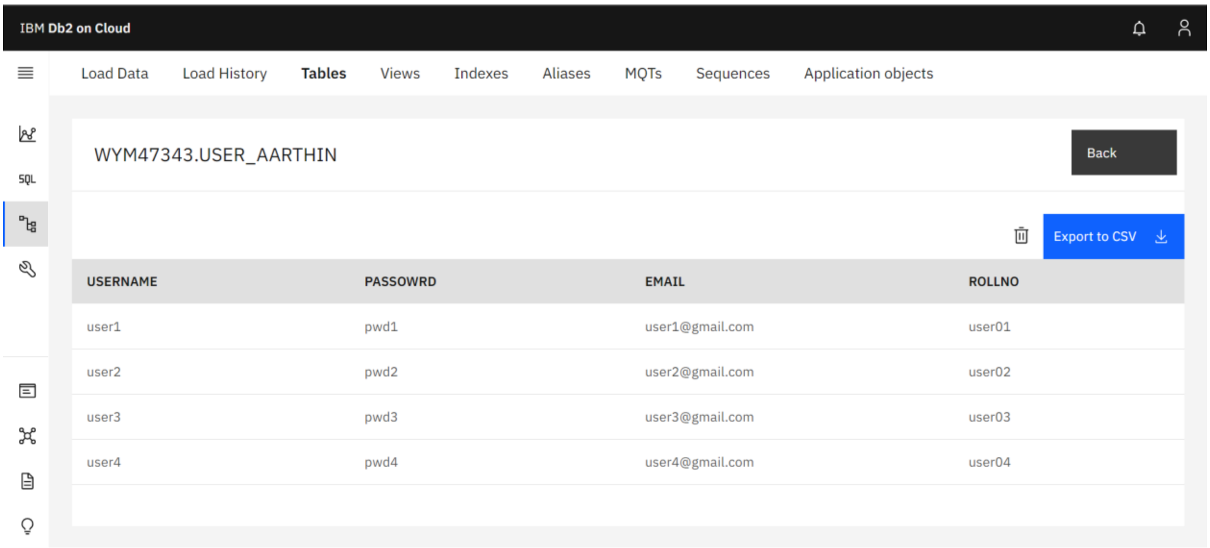
No statistics available.

Name	Data type	Nullable	Length	Scale
USERNAME	VARCHAR	Y	32	0
PASSOWRD	VARCHAR	Y	32	0
EMAIL	VARCHAR	Y	32	0

Insertion into USER_AARTHIN table:



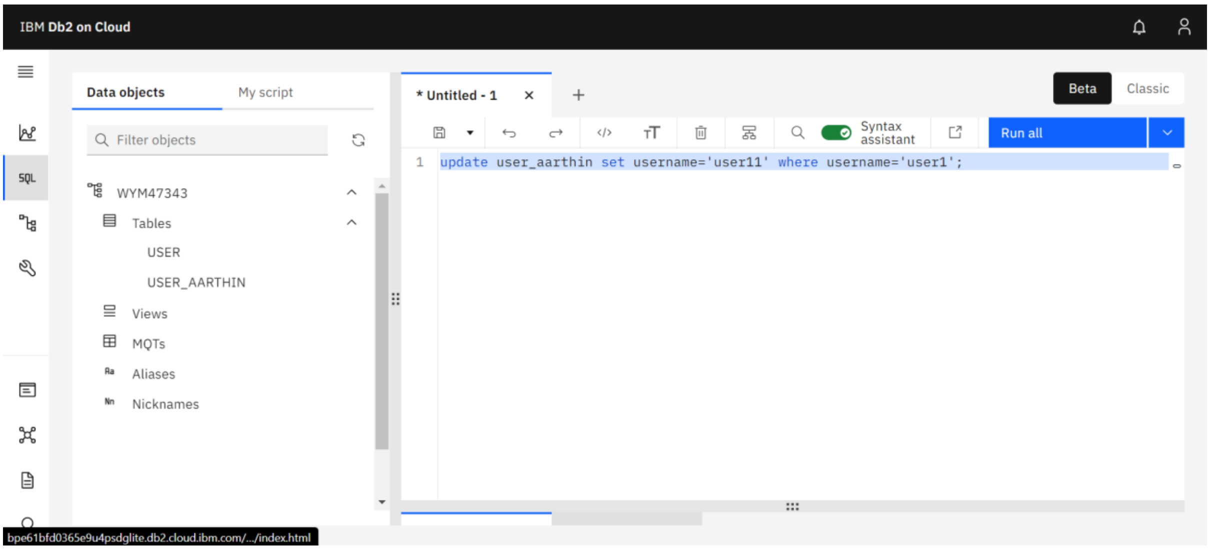
```
insert into user_aarthin values('user1','pwd1','user1@gmail.com','user01');
insert into user_aarthin values('user2','pwd2','user2@gmail.com','user02');
insert into user_aarthin values('user3','pwd3','user3@gmail.com','user03');
insert into user_aarthin values('user4','pwd4','user4@gmail.com','user04');
```



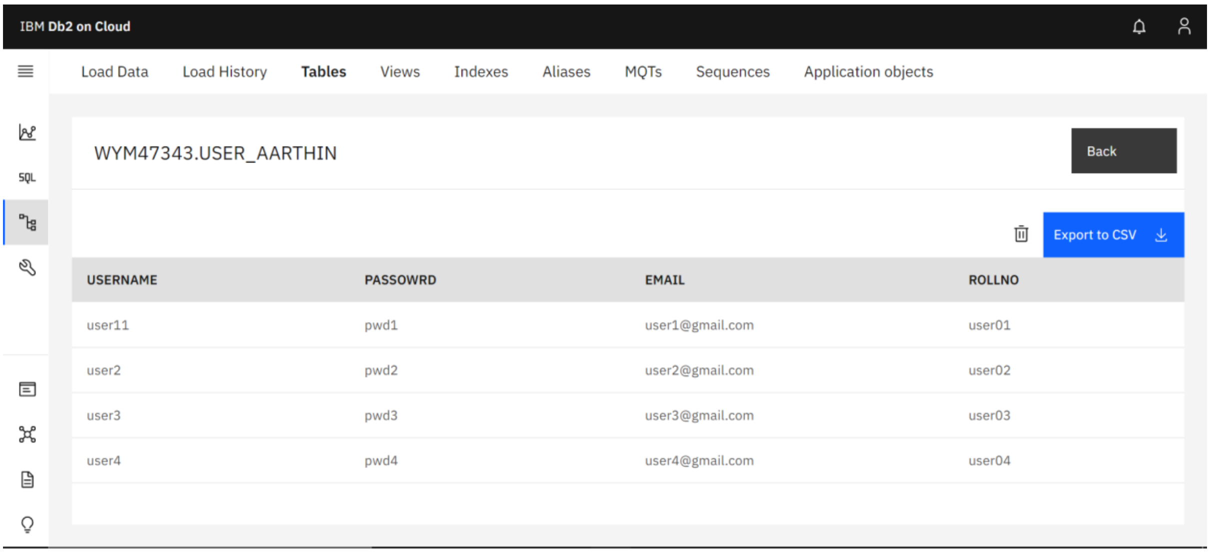
WYM47343.USER_AARTHIN

USERNAME	PASSOWRD	EMAIL	ROLLNO
user1	pwd1	user1@gmail.com	user01
user2	pwd2	user2@gmail.com	user02
user3	pwd3	user3@gmail.com	user03
user4	pwd4	user4@gmail.com	user04

Updating USER_AARTHIN table:



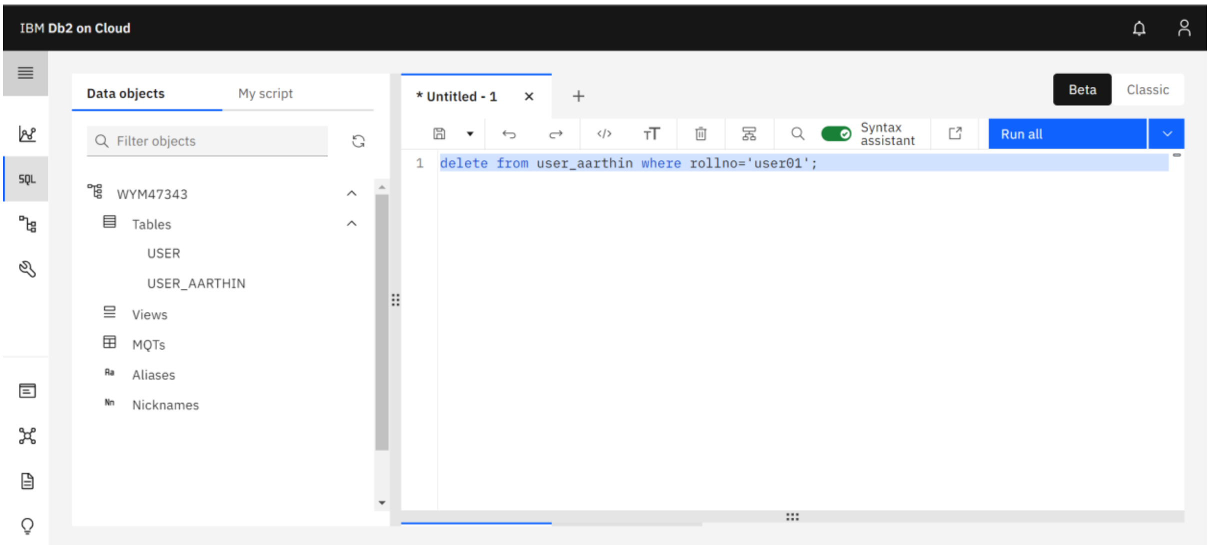
```
update user_aarthin set username='user11' where username='user1';
```



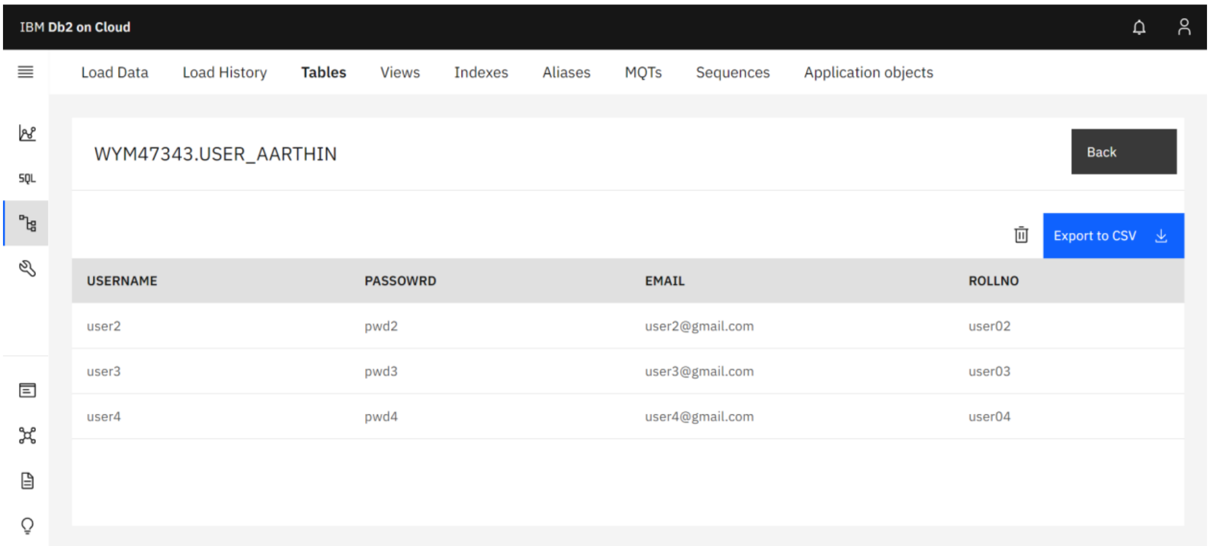
WYM47343.USER_AARTHIN

USERNAME	PASSOWRD	EMAIL	ROLLNO
user11	pwd1	user1@gmail.com	user01
user2	pwd2	user2@gmail.com	user02
user3	pwd3	user3@gmail.com	user03
user4	pwd4	user4@gmail.com	user04

Deleting from USER_AARTHIN table:



```
delete from user_aarthin where rollno='user01';
```



WYM47343.USER_AARTHIN

USERNAME	PASSOWRD	EMAIL	ROLLNO
user2	pwd2	user2@gmail.com	user02
user3	pwd3	user3@gmail.com	user03
user4	pwd4	user4@gmail.com	user04

Connecting to IBM DB2 from python:

```
conn=ibm_db.connect("DATABASE=bludb;HOSTNAME=19af6446-6171-4641-8aba-9dcff8e1b6ff.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=30699;Security=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=wym47343;PWD=KRCuyIBtvZY1adNZ;","","")
```

Source Code:

App.py

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


app=Flask(__name__, template_folder='resources')
app.secret_key='a'
conn=ibm_db.connect("DATABASE=bludb;HOSTNAME=19af6446-6171-4641-8aba-
9dcff8e1b6ff.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=30699;Security=SSL;
SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=wym47343;PWD=KRCuyIBtvZY1adNZ;","
","")
@app.route('/', methods=['GET','POST'])
def register():
    msg=" "
    if request.method=='POST':
        username=request.form['username']
        password=request.form['password']
        email=request.form['email']
        rollno=request.form['rollno']
        sql="INSERT INTO user_aarthin VALUES(?,?,?,?)"
        stmt=ibm_db.prepare(conn,sql)
        ibm_db.bind_param(stmt,1,email)
        ibm_db.bind_param(stmt,2,username)
        ibm_db.bind_param(stmt,3,rollno)
        ibm_db.bind_param(stmt,4,password)
        ibm_db.execute(stmt);
        msg='Succesfully registered!'
        return redirect(url_for('login'))
    elif request.method=='GET':
        msg='Please fill 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']
        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:
            session['loggedin']=True
            session['id']=account['USERNAME']
            userid=account['USERNAME']
            session['username']=account["USERNAME"]
            msg='Logged in successfully'
            return render_template("welcome.html",msg=msg,username=userid)
        else:
            msg='Incorrect username/password'
            return render_template('login.html', msg=msg)
    elif request.method=='GET':
        return render_template('login.html')



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

Register.html

```
<html>
<body>
<h2 style="color:blue">{{msg}}</h2>
<form action="/" method="POST">
<fieldset>
  <legend>User Information</legend>
<h2>Username:<h2> <input type="text" name="username" placeholder="Enter username
"><br/><br/>
<h2>Password:<h2> <input type="password" name="password"><br/><br/>
<h2>Email:<h2> <input type="email" name="email" placeholder="Enter email"><br/><br/>
<h2>Roll number:<h2> <input type="text" name="rollno" placeholder="Enter roll
number"><br/><br/>
<input type="submit" value="Register">
</fieldset>
</form>
</body>
</html>
```

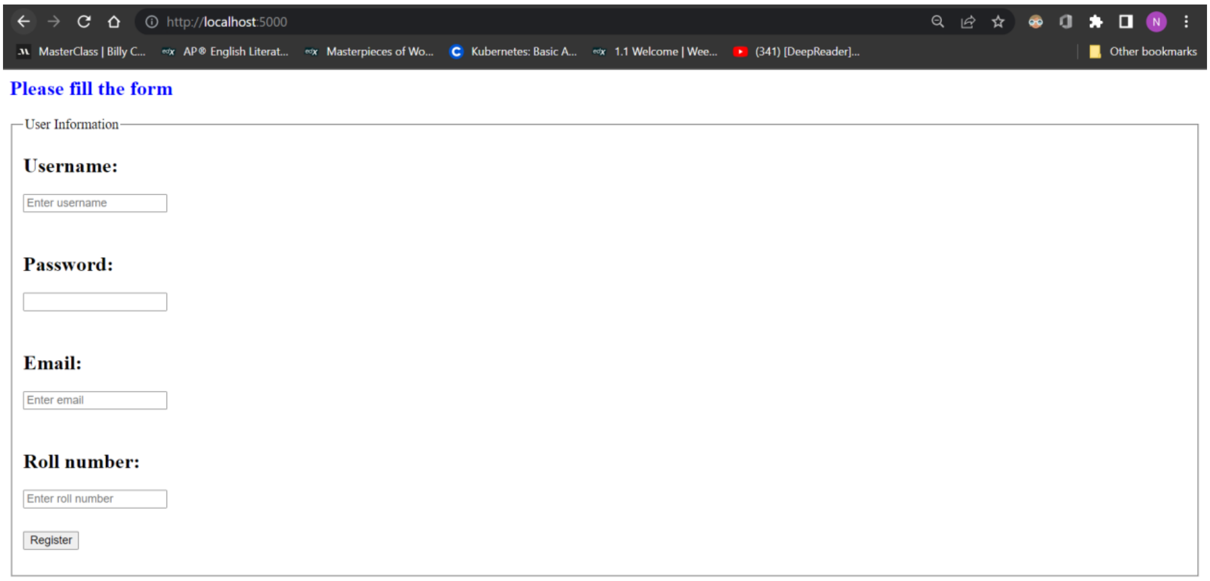
Login.html

```
<html>

<body>

<h2 style="color:blue">{{msg}}</h2>

<form action="/login" method="POST">

  <fieldset>

    <legend>User Login:</legend>

<h2>Username:</h2> <input type="text" name="username" placeholder="Enter
username"><br/><br/>

<h2>Password:</h2> <input type="password" name="password"
placeholder="**********"><br/><br/>

<input type="submit" value="Login">

<fieldset>

</form>

</body>

</html>
```

Welcome.html

```
<h1 style="color:blue">Welcome {{username}}!</h1>

<h2>{{msg}}</h2>
```

Register.html



Please fill the form

User Information

Username:

Enter username

Password:

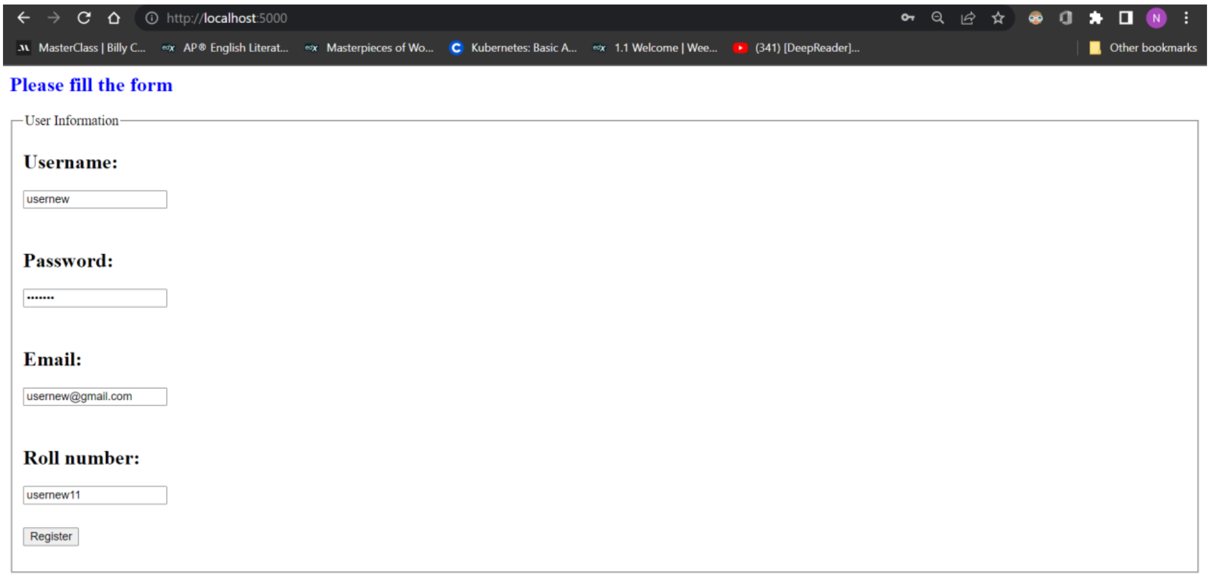
Email:

Enter email

Roll number:

Enter roll number

Register



Please fill the form

User Information

Username:

usernew

Password:

•••••••

Email:

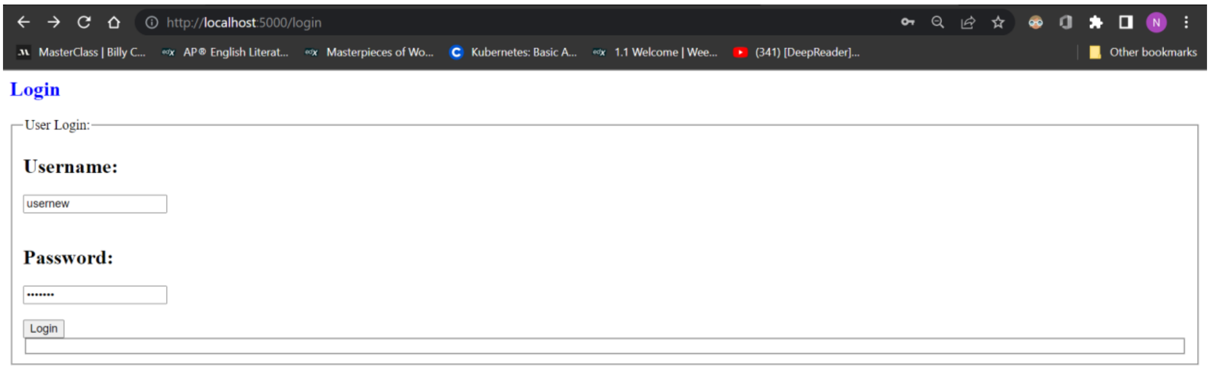
usernew@gmail.com

Roll number:

usernew11

Register

Login.html (correct login)



Login

User Login:

Username:

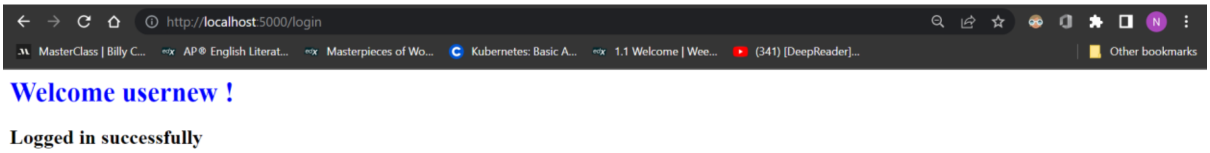
usernew

Password:

•••••••

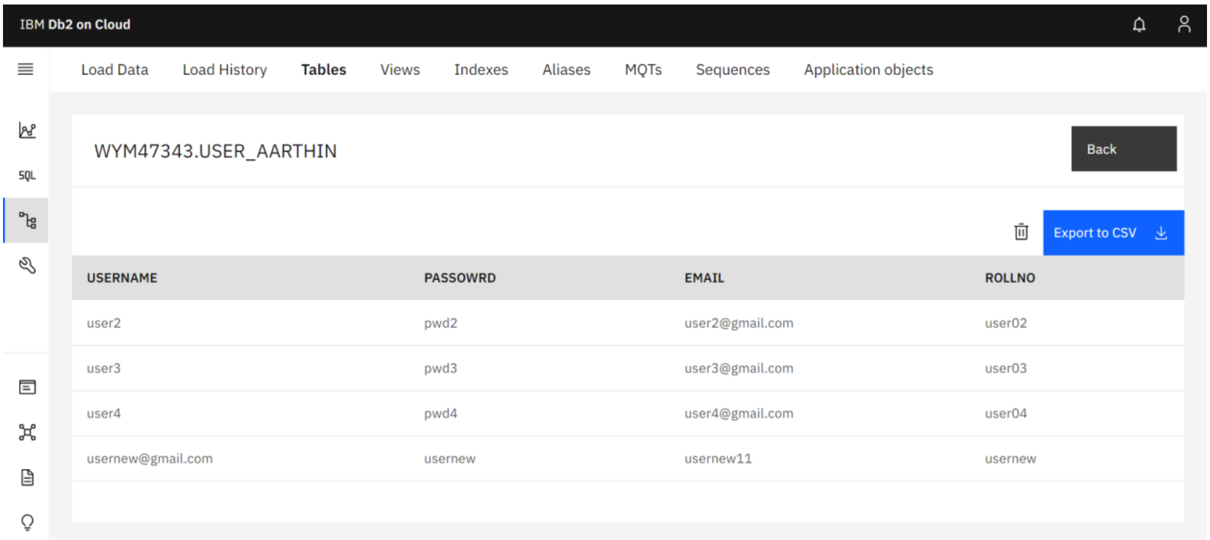
Login

Welcome.html



Welcome usernew !

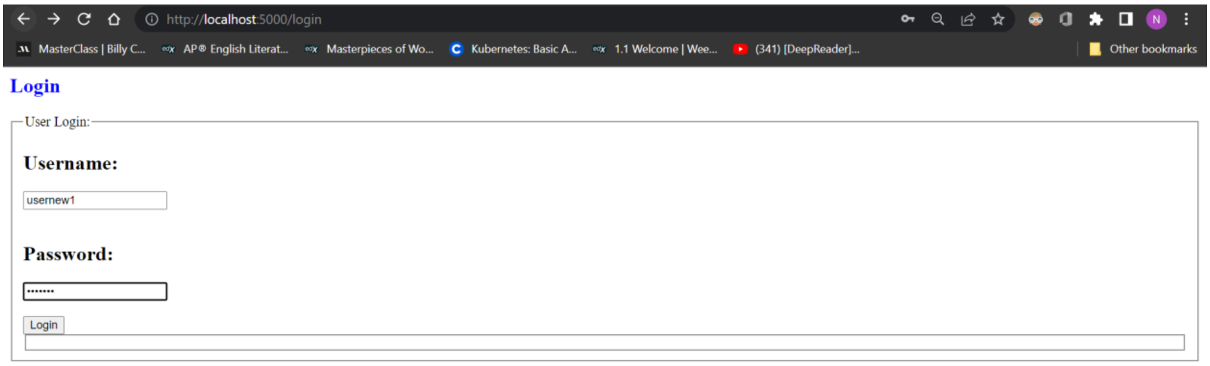
Logged in successfully



WYM47343.USER_AARTHIN

USERNAME	PASSOWRD	EMAIL	ROLLNO
user2	pwd2	user2@gmail.com	user02
user3	pwd3	user3@gmail.com	user03
user4	pwd4	user4@gmail.com	user04
usernew@gmail.com	usernew	usernew11	usernew

Login.html (incorrect login)



Login

User Login:

Username:

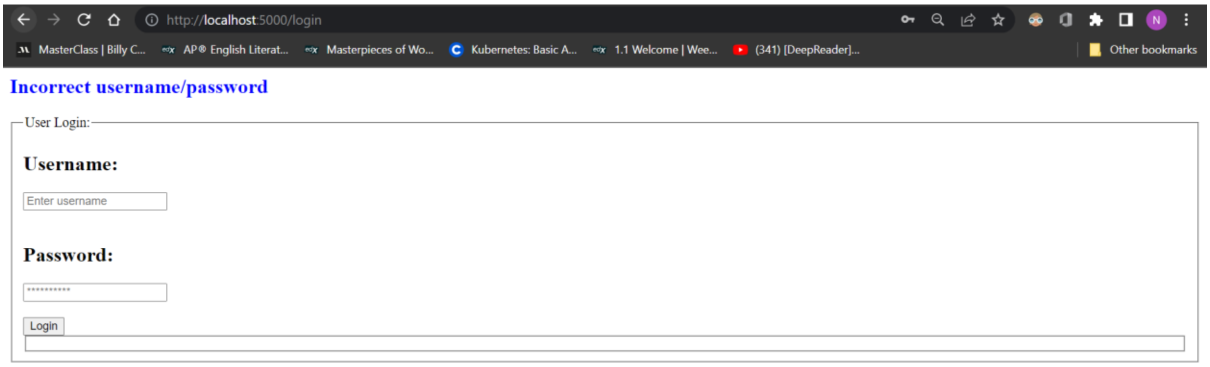
usernew1

Password:

•••••••

Login

Login.html (incorrect login)



Incorrect username/password

User Login:

Username:

Enter username

Password:

****