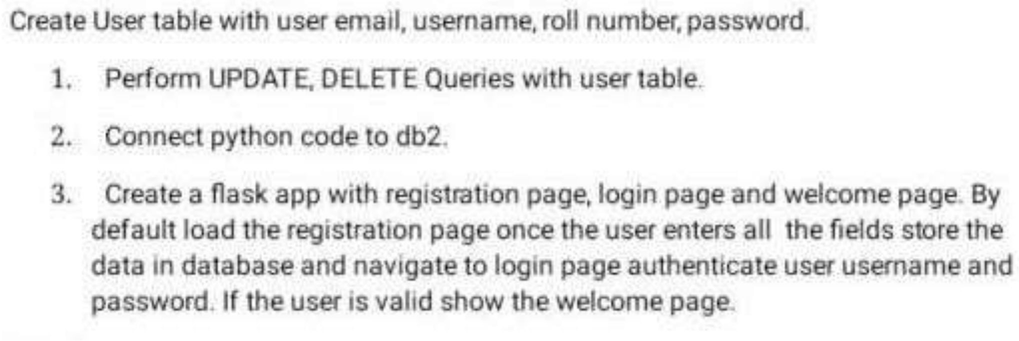
Assignment-2

DATE	13 NOVEMBER 2022
TEAM ID	PNT2022TMID52442
MAXIMUM MARK	2 Mark

Questions:

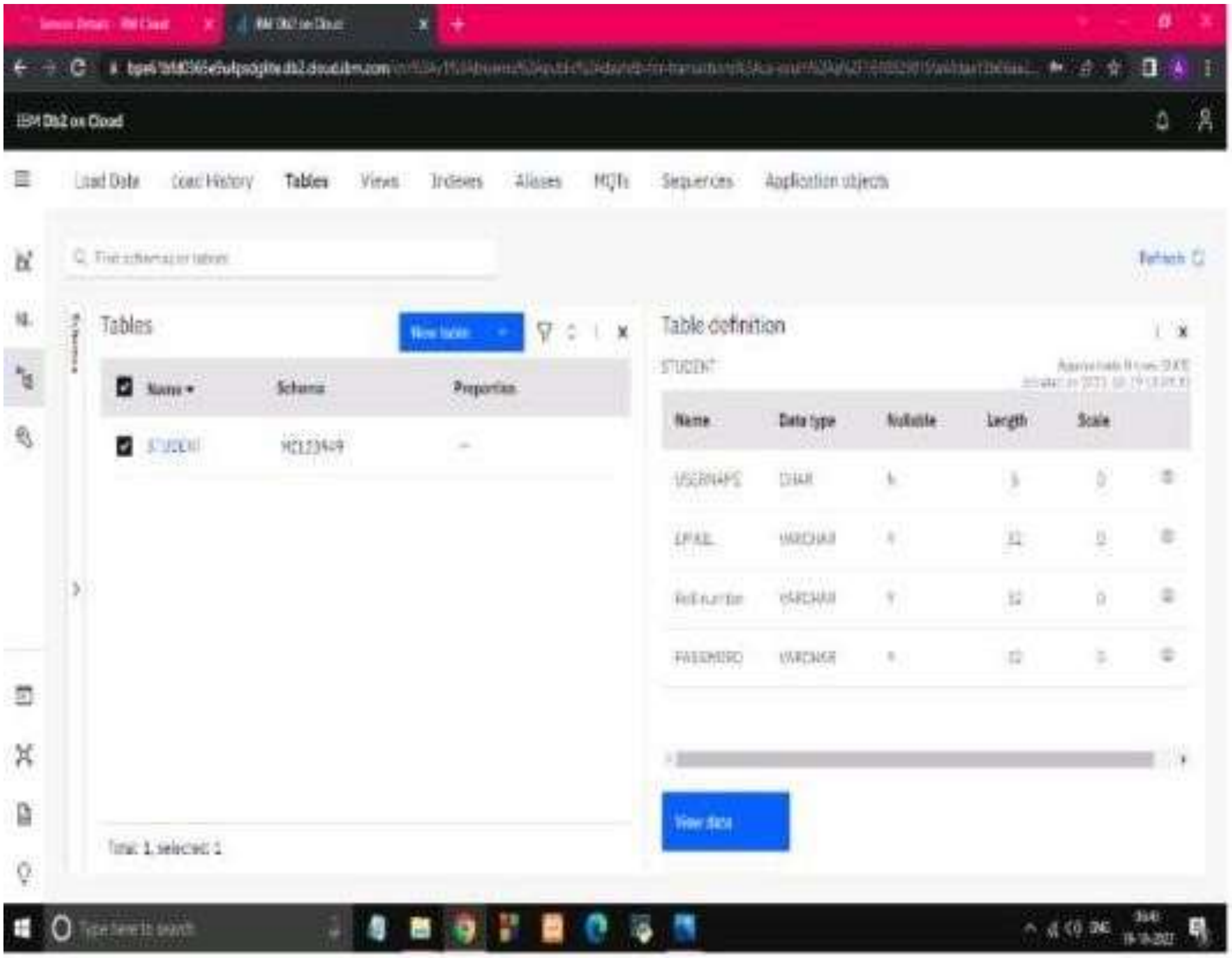


Create User table with user email, username, roll number, password.

1. Perform UPDATE, DELETE Queries with user table.
2. Connect python code to db2.
3. 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.

Solutions:

1. Creating user table with user email, username, roll number, password.



IBM Db2 on Cloud

Load Data | Load History | Tables | Views | Indexes | Aliases | MQTs | Sequences | Application objects

Tables

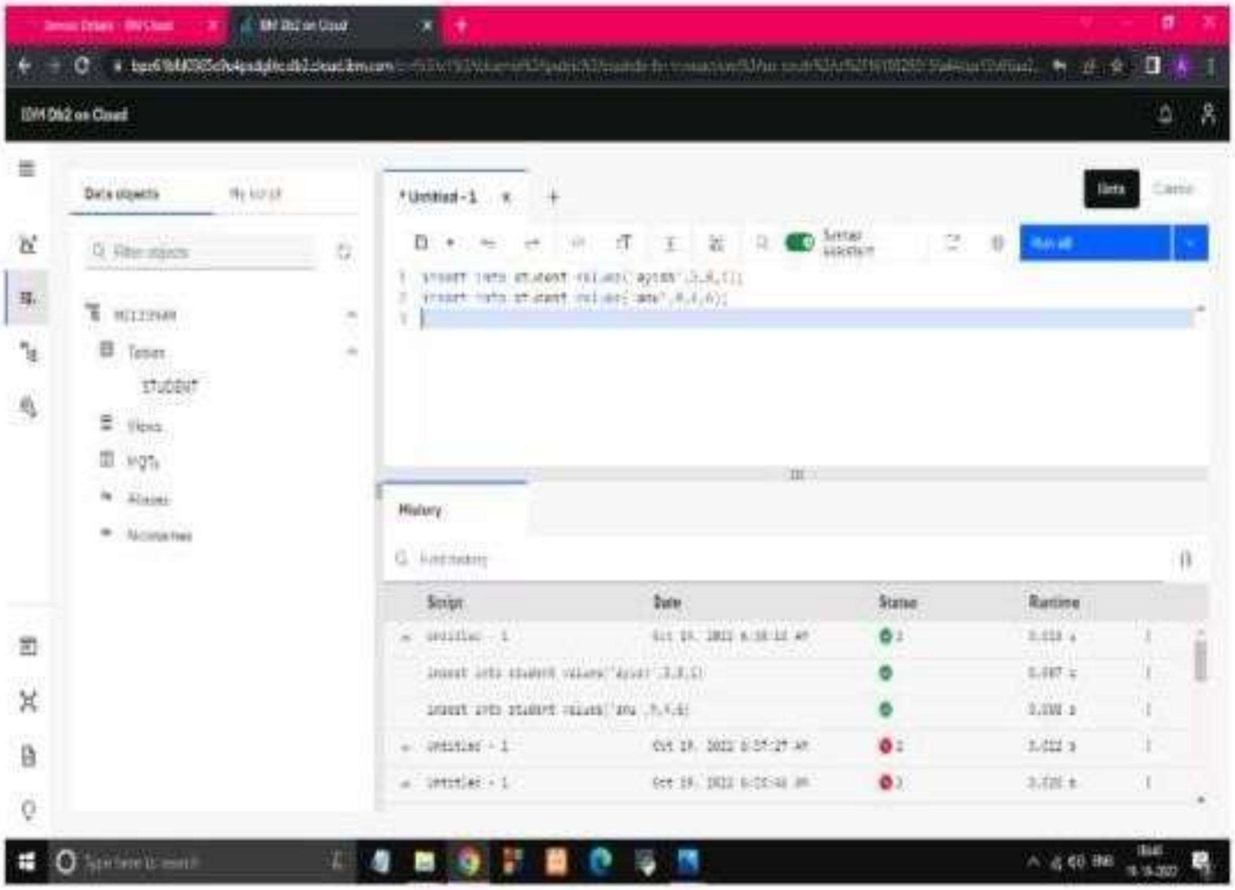
☑ Name	Schema	Properties
☑ STUDENT	HCL23949	–

Total: 1, selected: 1

Table definition

STUDENT

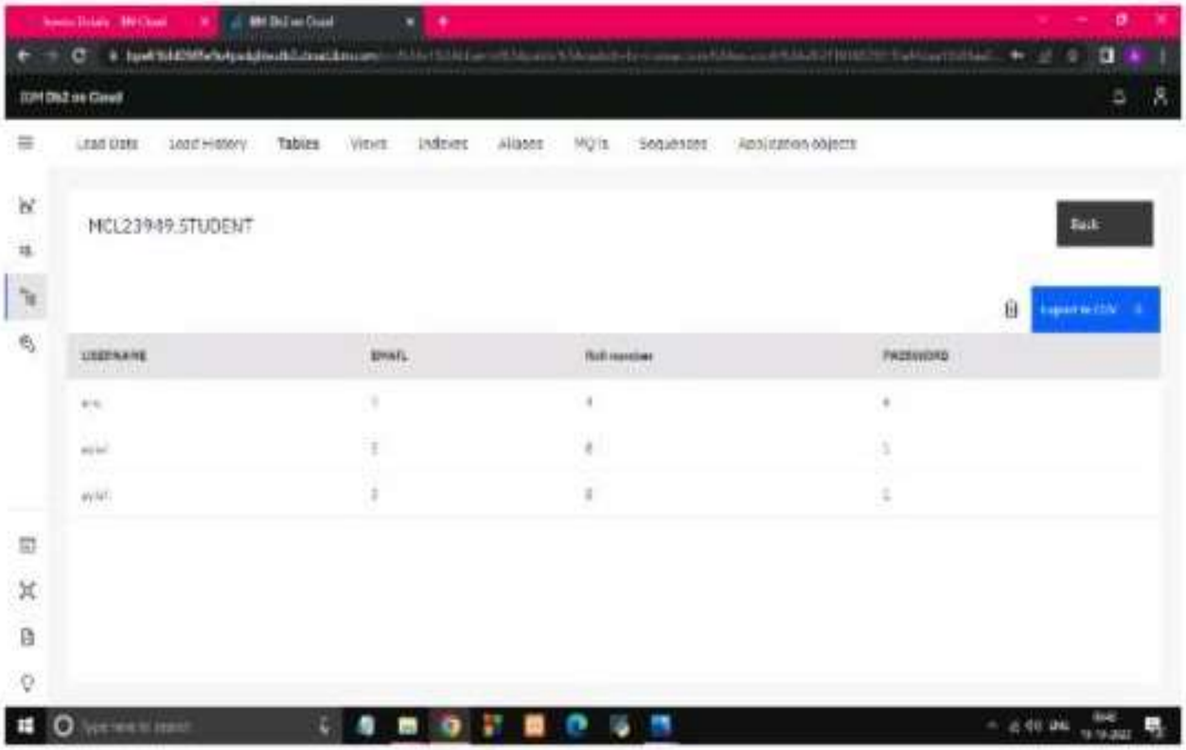
Name	Data type	Nullable	Length	Scale
USERNAME	CHAR	N	5	0
EMAIL	VARCHAR	Y	32	0
Roll number	VARCHAR	Y	32	0
PASSWORD	VARCHAR	Y	32	0



```
insert into student values('ayush',3,8,[illegible]);
insert into student values('anu',[illegible],4,6);
```

Script	Date	Status	Runtime
Untitled - 1	Oct 19, 2022 6:38:12 AM	● 2	[illegible] s
insert into student values('ayush',3,8,[illegible])		●	[illegible] s
insert into student values('anu',[illegible],4,6)		●	[illegible] s
Untitled - 1	Oct 19, 2022 6:37:27 AM	● 2	[illegible] s
Untitled - 1	Oct 19, 2022 6:35:[illegible] AM	● 3	[illegible] s

Output:

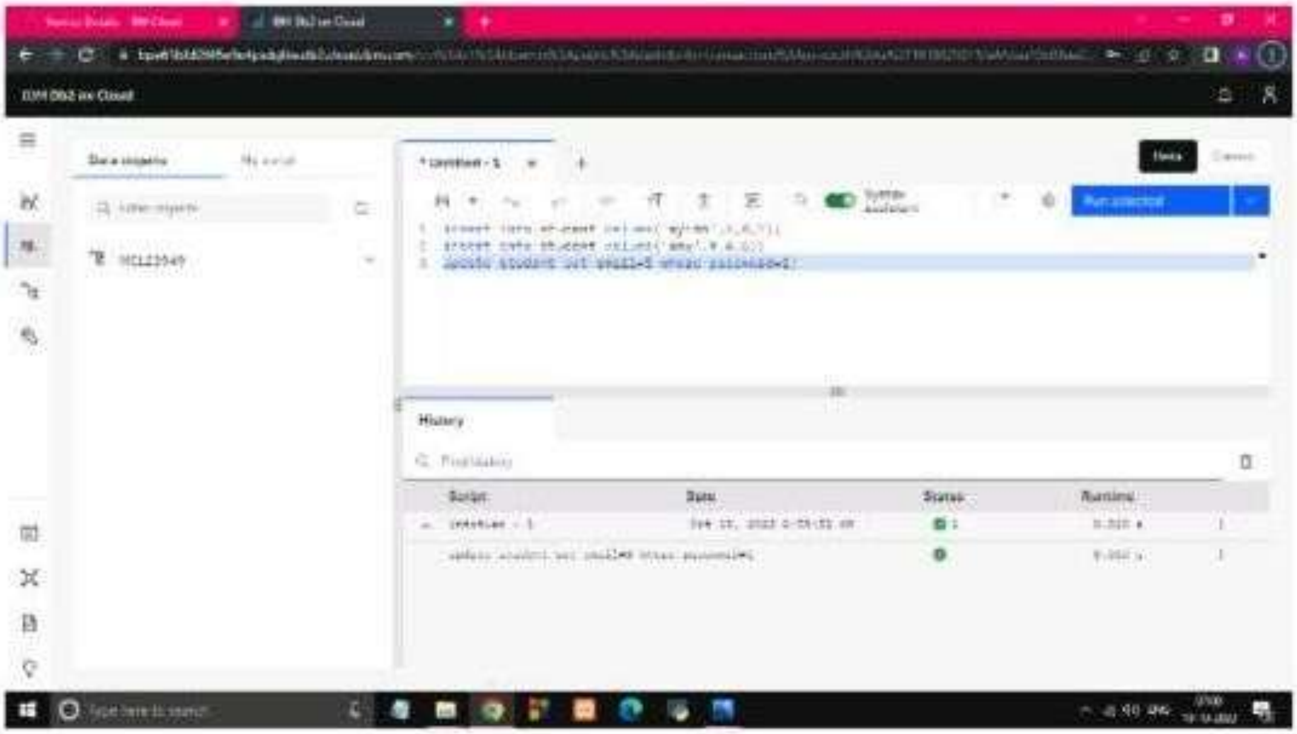


MCL23949.STUDENT

USERNAME	EMAIL	Roll number	PASSWORD
[illegible]	1	4	4
[illegible]	2	8	1
[illegible]	2	8	1

2. Performing UPDATE, DELETE Queries with user table

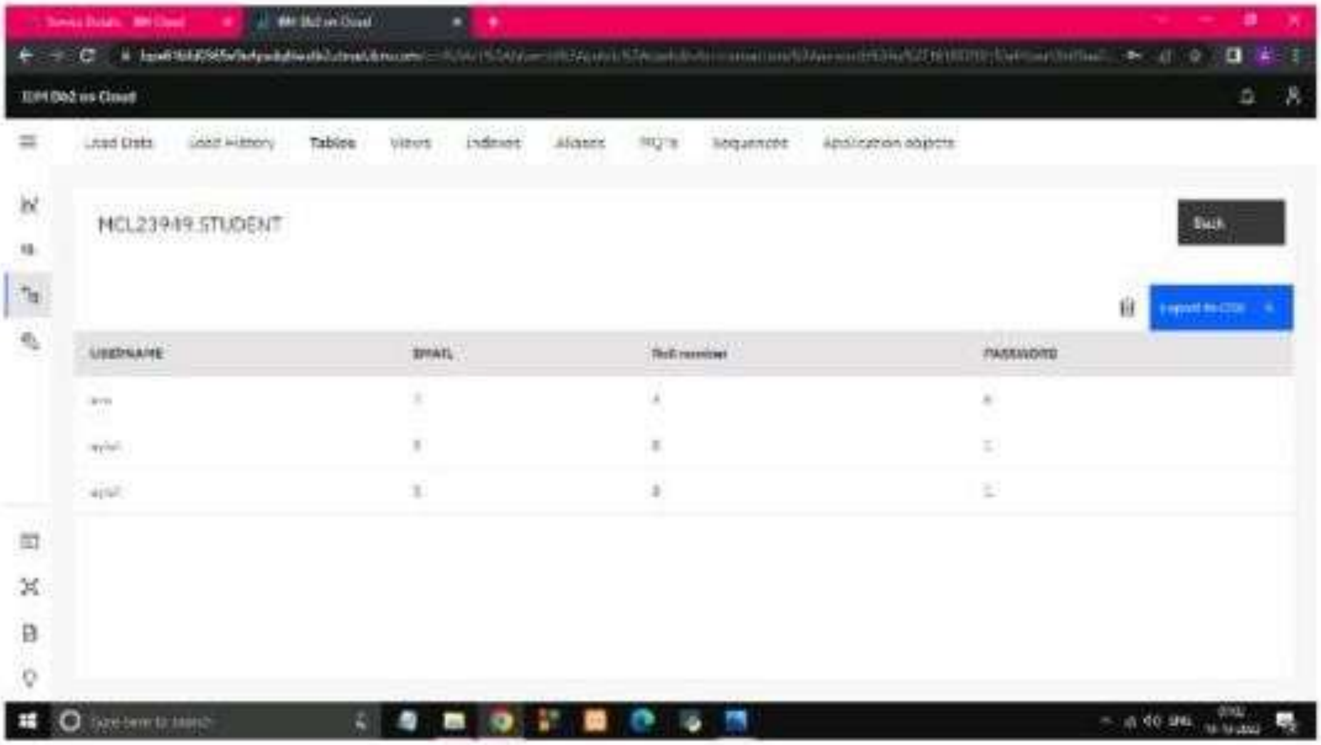
UPDATE:



```
insert into student values('[illegible]',1,6,7);
insert into student values('amy',9,4,1);
update student set [illegible]=5 where [illegible]=1;
```

Script	Date	Status	Runtime
Untitled - 1	Feb 15, 2023 [illegible]	1	0.020 s
update student set [illegible] where [illegible]			[illegible]

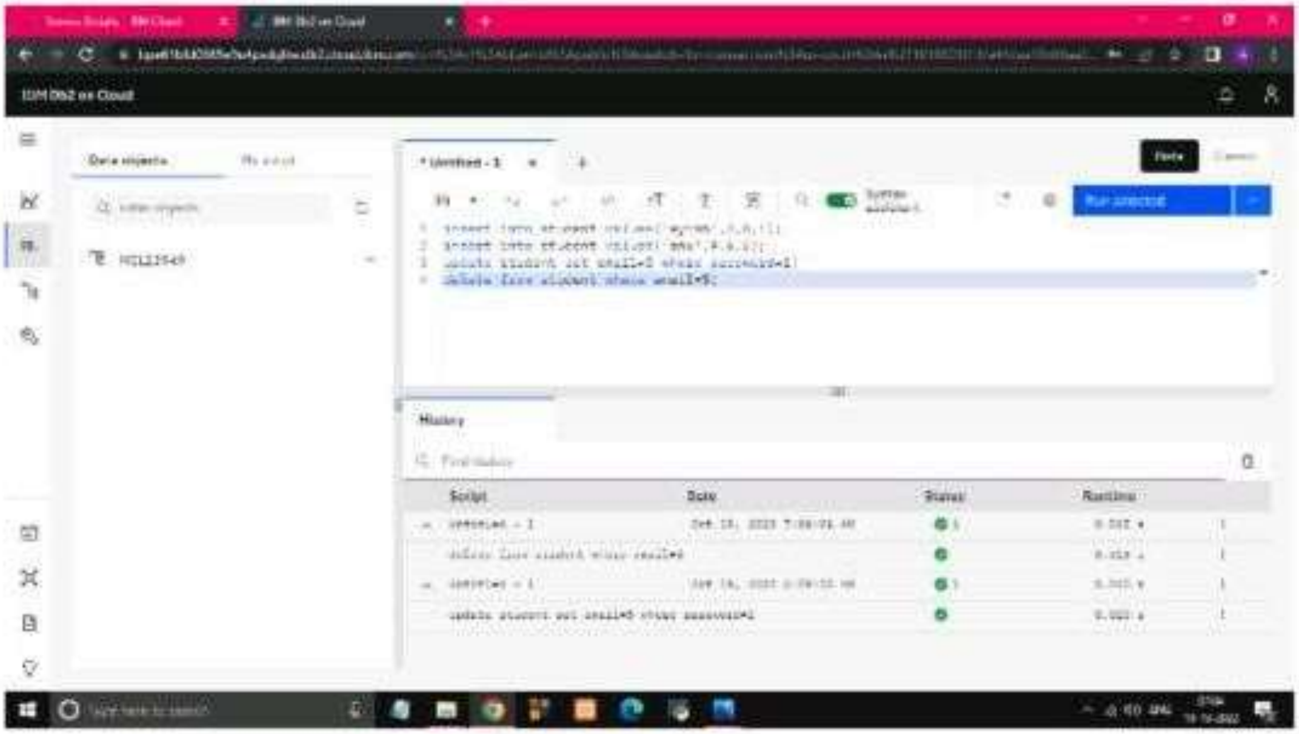
OUTPUT:



MCL23949.STUDENT

USERNAME	EMAIL	Roll number	PASSWORD
[illegible]	7	4	6
[illegible]	3	8	1
[illegible]	3	8	1

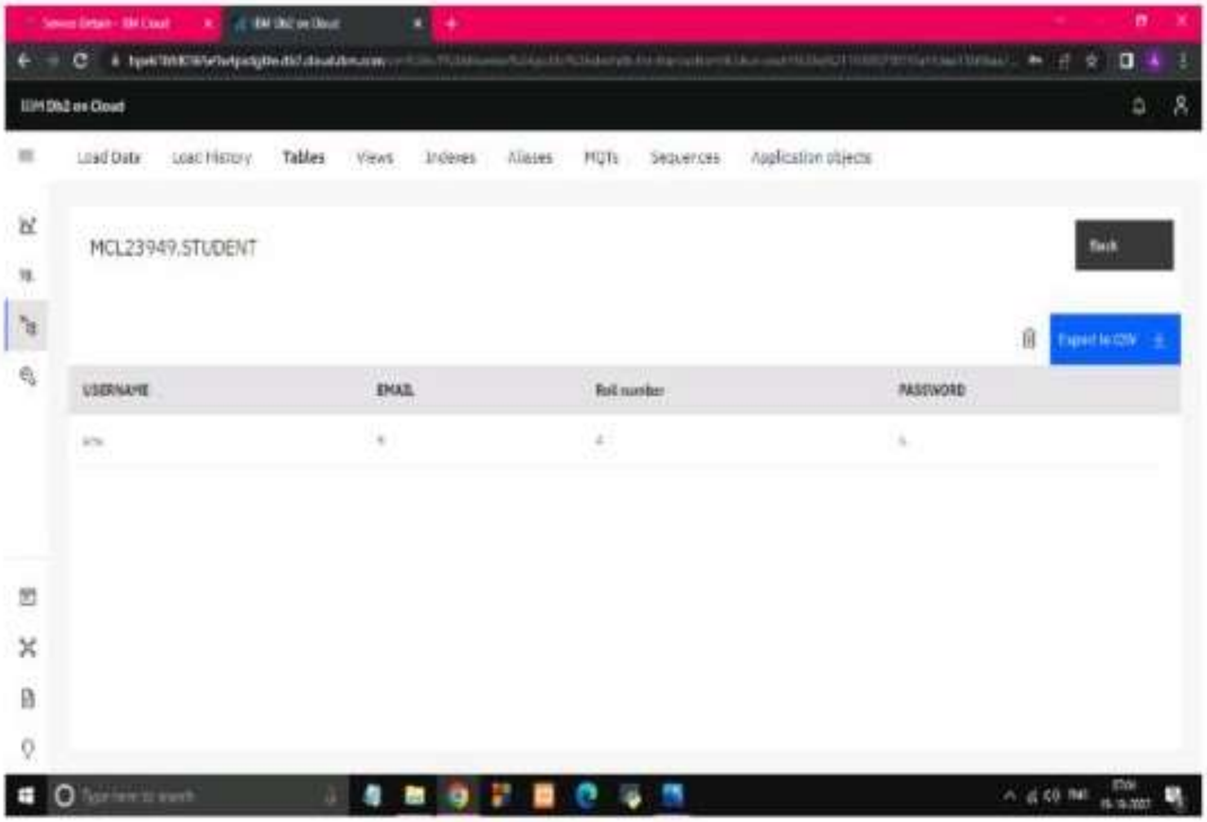
DELETE:



```
insert into student values('[illegible]',[illegible]);
insert into student values('[illegible]',[illegible]);
update student set email=2 where password=1;
delete from student where email=5;
```

	Script	Date	Status	Runtime
⌄	Untitled - 1	Oct 19, 2022 7:08:[illegible] AM	● 1	[illegible] s
	delete from student where email=[illegible]		●	[illegible] s
⌄	Untitled - 1	Oct 19, 2022 [illegible] AM	● 1	[illegible] s
	update student set email=5 where password=1		●	[illegible] s

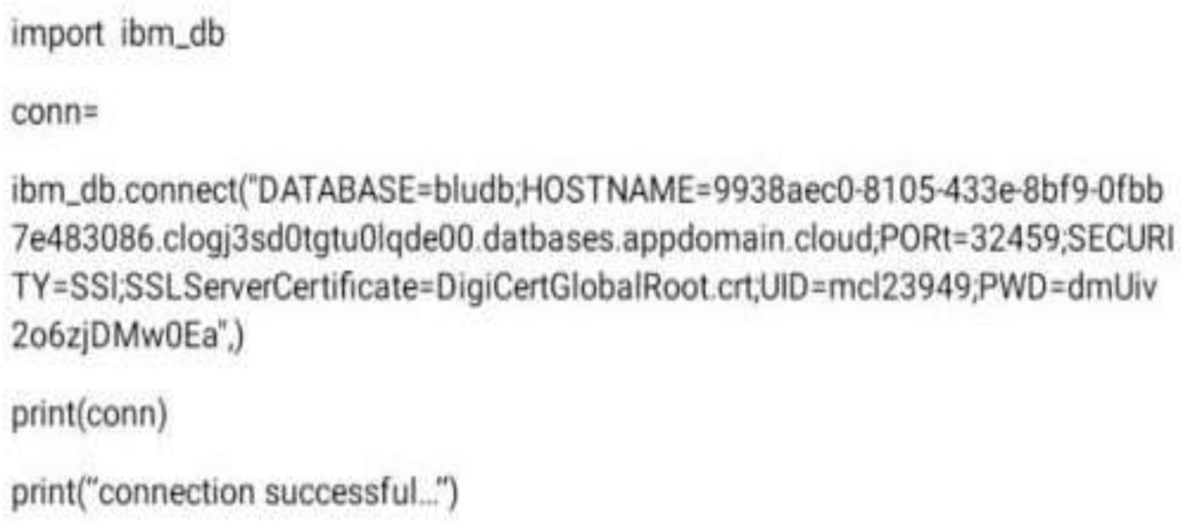
OUTPUT:



MCL23949.STUDENT

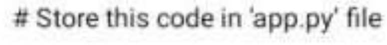
USERNAME	EMAIL	Roll number	PASSWORD
[illegible]	[illegible]	[illegible]	[illegible]

3.Connect python code to db2.



```
import  ibm_db

conn=

ibm_db.connect("DATABASE=bludb;HOSTNAME=9938aec0-8105-433e-8bf9-0fbb
7e483086.clogj3sd0tgtu0lqde00.datbases.appdomain.cloud;PORt=32459;SECURI
TY=SSl;SSLServerCertificate=DigiCertGlobalRoot.crt;UID=mcl23949;PWD=dmUiv
2o6zjDMw0Ea",)

print(conn)

print("connection successful...")
```

4.Creating a flask app with registration page, login page and welcome page.



```
# Store this code in 'app.py' file
```

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

import ibm_db

import re

conn=ibm_db.connect("DATABASE=bludb;HOSTNAME=9938aec0-8105-433e-8bf
9-0fbb7e483086.clogj3sd0tgtu0lqde00.datbases.appdomain.cloud;PORt=32459;
SECURITY=SSl;SSLServerCertificate=DigiCertGlobalRoot.crt;UID=mcl23949;PWD=
dmUiv2o6zjDMw0Ea",)


app = Flask(__name__)

app.secret_key='a'

conn = ibm_db.connect()

@app.route('/')

@app.route('/login', methods =['GET', 'POST'])

def login():

msg = ''

if request.method == 'POST' and 'username' in request.form and 'password' in
request.form:

username = request.form['username']

password = request.form['password']

sql=('SELECT * FROM users WHERE username = % s AND password = % s',
(username, 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.fet_assoc(stmt)
```

```
print(account)
if account:
session['loggedin'] = True
session['id'] = account['id']
session['username'] = account['username']
msg = 'Logged in successfully !'
return render_template('index.html', msg = msg)
else:
msg = 'Incorrect username / password !'
return render_template('login.html', msg = msg)

@app.route('/logout')
def logout():
session.pop('loggedin', None)
session.pop('id', None)
session.pop('username', None)
return redirect(url_for('login'))

@app.route('/register', methods =['GET', 'POST'])
def register():
msg = ''
if request.method == 'POST' and 'username' in request.form and 'password' in request.form and 'email' in request.form :
username = request.form['username']
password = request.form['password']
```

```
email = request.form['email']

sql=('SELECT * FROM users WHERE username = % s AND password = % s',
(username, password, ))

stmt = ibm_db.prepare(conn,sql)

ibm_db.bind_param(stmt,1,username)

            ibm_db.execute(stmt)

            account = ibm_db.fet_assoc(stmt)

            print(account)

if account:

msg = 'Account already exists !'

elif not re.match(r'[^@]+@[^@]+\.[^@]+', email):

msg = 'Invalid email address !'

elif not re.match(r'[A-Za-z0-9]+', username):

msg = 'Username must contain only characters and numbers !'

elif not username or not password or not email:

msg = 'Please fill out the form !'

else:

insert_sql=('INSERT INTO accounts VALUES (NULL, % s, % s, % s)', (username,
password, email, ))

prep_stmt = ibm_db.prepare(conn,insert_sql)

ibm_db.bind_param(prep_stmt,1,username)

            ibm_db.bind_param(stmt,2,password)

            ibm_db.bind_param(stmt,3,email)

            ibm_db.execute(prep_stmt)

msg = 'You have successfully registered !'

elif request.method == 'POST':
```

```
msg = 'Please fill out the form !'
return render_template('register.html', msg = msg)
  if __name__=='__main__':
    app.run(host='0.0.0.0')
```

register.html:

```
<html>
<head>
<meta charset="UTF-8">
<title> Register </title>
<link rel="stylesheet" href="{{ url_for('static', filename='style.css') }}">
</head>
<body style="background-color:powderblue;"></br></br></br></br></br>
<div align="center">
<div align="center" class="border">
<div class="header">
<h1 class="word">Register</h1>
</div></br></br></br>
<h2 class="word">
<form action="{{ url_for('register') }}" method="post">
<input id="username" name="username" type="text" placeholder="Enter Your
Username" class="textbox"/></br></br>
<input id="password" name="password" type="password" placeholder="Enter
Your Password" class="textbox"/></br></br>
<input id="email" name="email" type="text" placeholder="Enter Your Email ID"
class="textbox"/></br></br>
```

```
<input type="submit" class="btn" value="Sign Up"></br>

</form>

</h2>

<p class="bottom">Already have an account? <a class="bottom"
href="{{url_for('login')}}"> Sign In here</a></p>

</div>

</div>

</body>

</html>
```

login.html:

```
<html>

<head>

<meta charset="UTF-8">

<title> Login </title>

<link rel="stylesheet" href="{{ url_for('static', filename='style.css') }}">

</head>

<body></br></br></br></br></br>

<div align="center">

<div align="center" class="border">

<div class="header">

<h1 class="word">Login</h1>

</div></br></br></br>

<h2 class="word">

<form action="{{ url_for('login') }}" method="post">
```

```
<input id="username" name="username" type="text" placeholder="Enter Your
Username" class="textbox"/></br></br>

<input id="password" name="password" type="password" placeholder="Enter
Your Password" class="textbox"/></br></br></br>

<input type="submit" class="btn" value="Sign In"></br></br>

</form>

</h2>

<p class="bottom">Don't have an account? <a class="bottom"
href="{{url_for('register')}}"> Sign Up here</a></p>

</div>

</div>

</body>

</html>
```

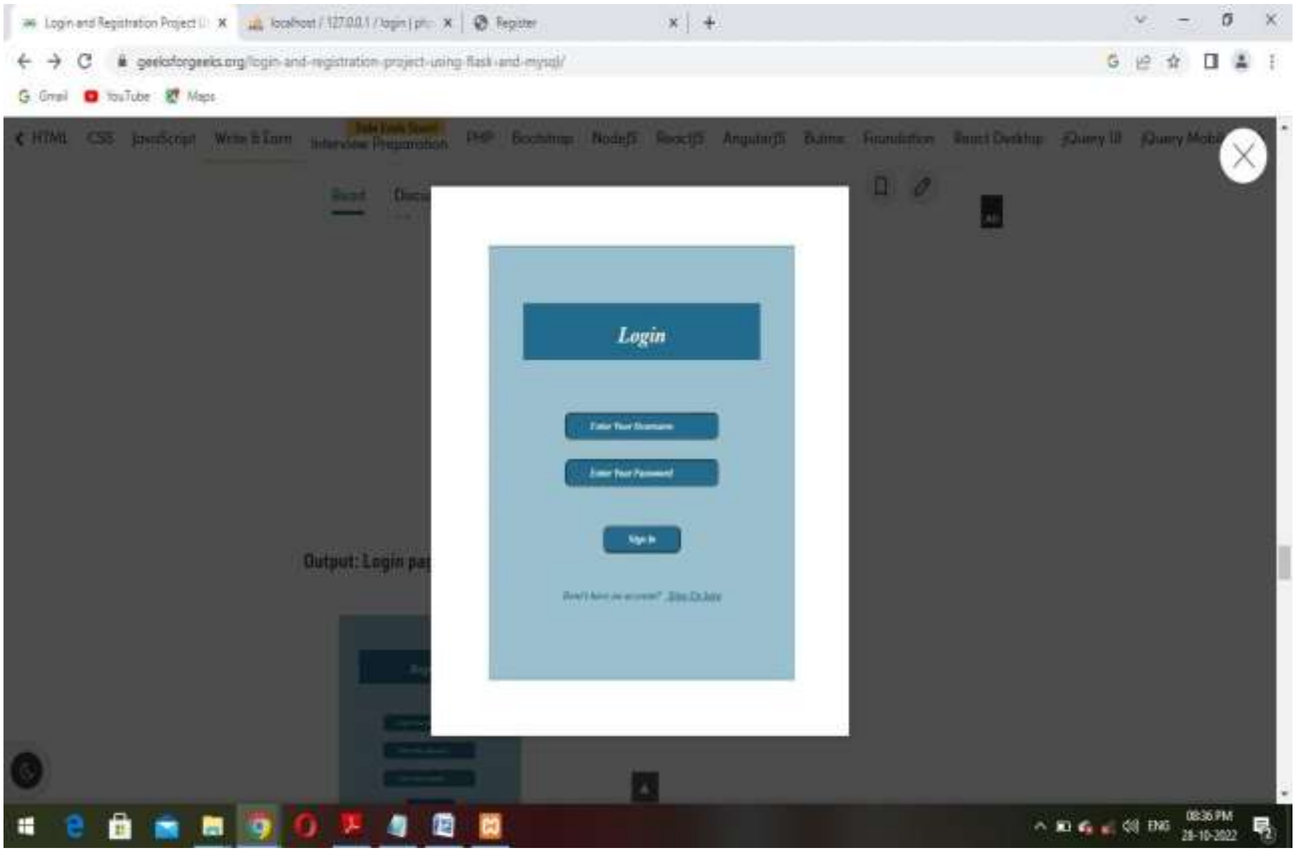
Index.html:

```
<html>

<head>

<meta charset="UTF-8">

<title> Index </title>

<link rel="stylesheet" href="{{ url_for('static', filename='style.css') }}">

</head>

<body></br></br></br></br></br>

<div align="center">

<div align="center" class="border">

<div class="header">

<h1 class="word">Index</h1>
```

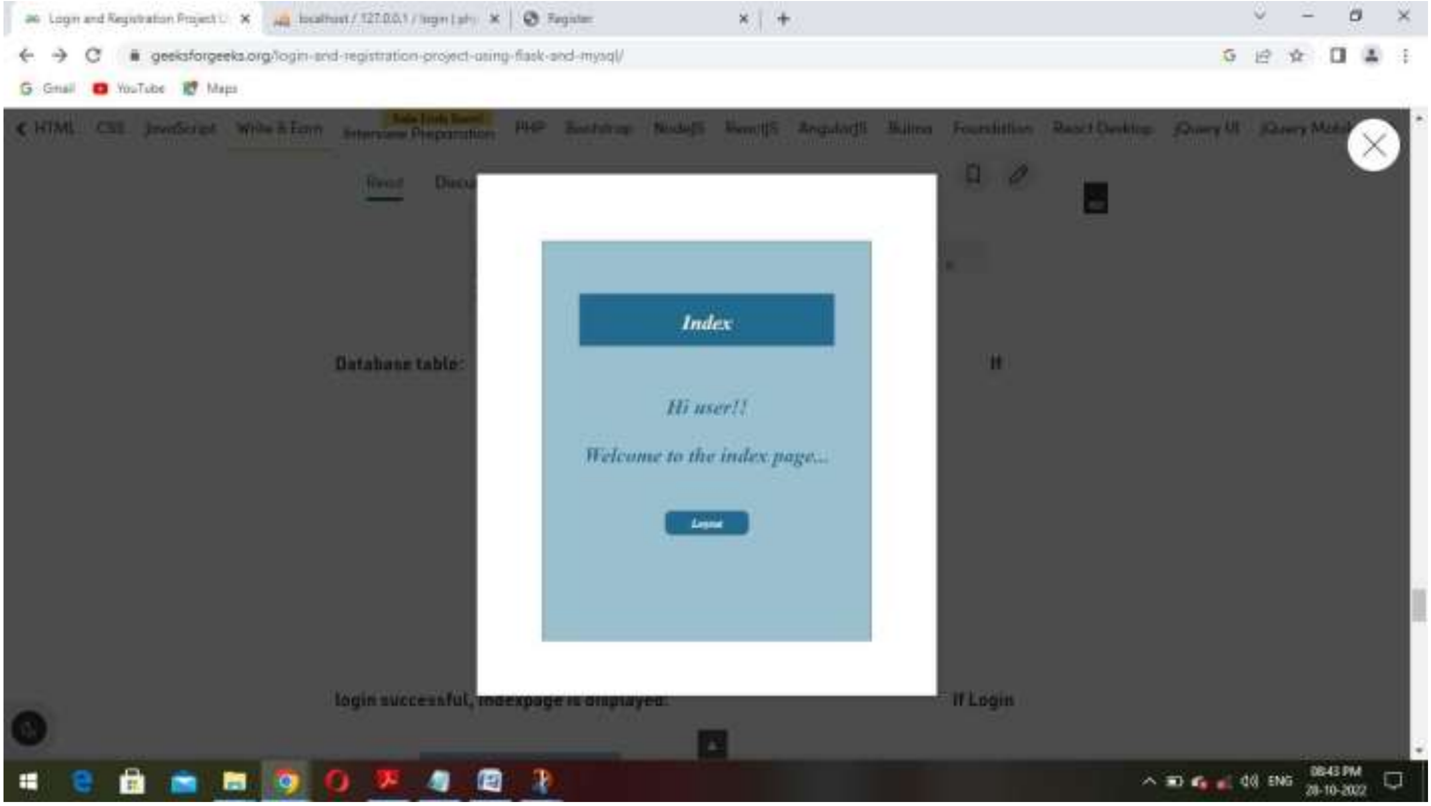
```
</div></br></br></br>

<h1 class="bottom">

Hi {{session.username}}!!</br></br> Welcome to the index page...

</h1></br></br></br>

<a href="{{ url_for('logout') }}" class="btn">Logout</a>

</div>

</div>

</body>

</html>
```

OUTPUT

Register page:



Welcome Page:



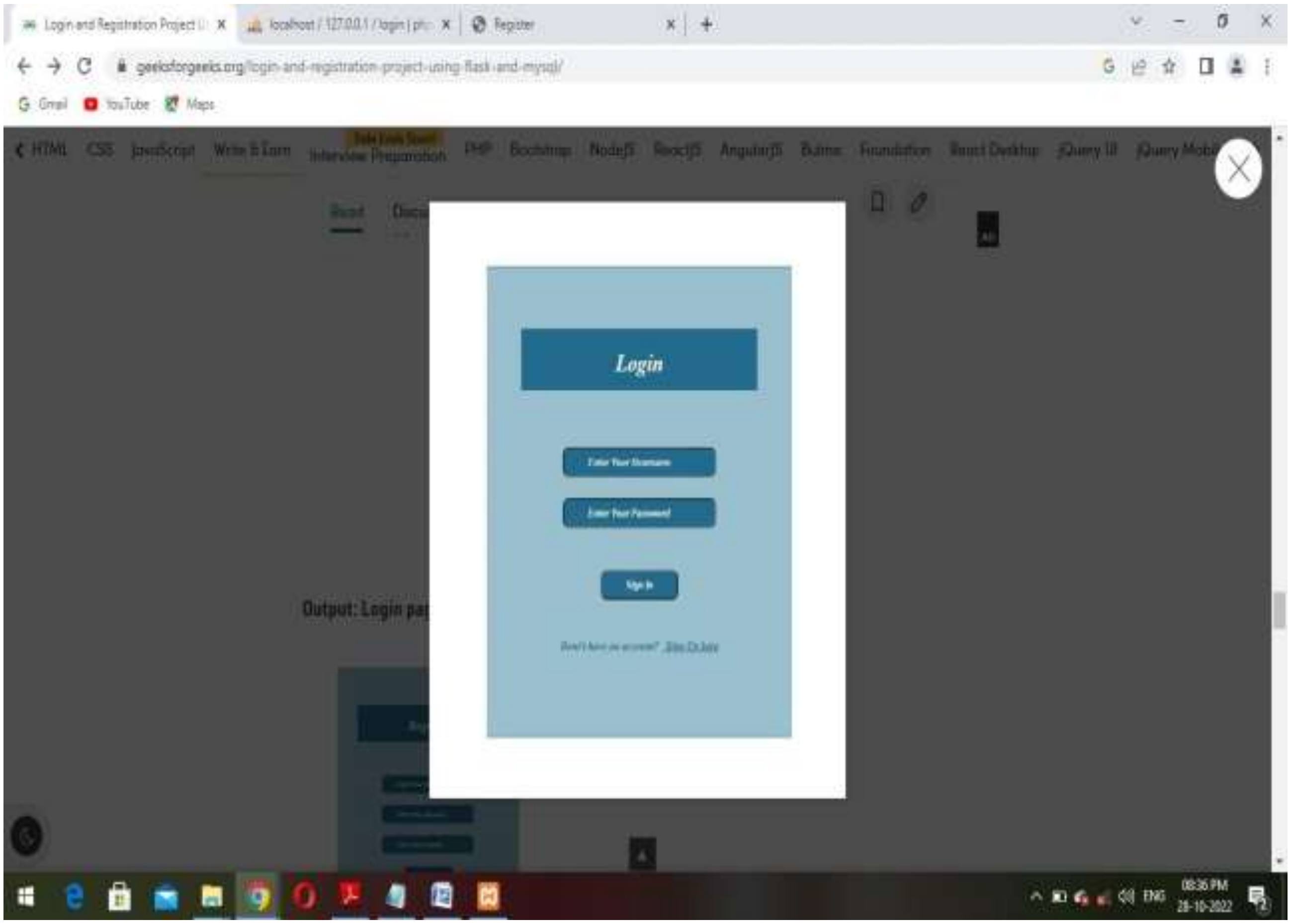
Index

Hi user!!

Welcome to the index page...

Logout
geeksforgeeks.org/login-and-registration-project-using-flask-and-mysql/
Login and Registration Project U
localhost / 127.0.0.1 / login | ph
Register
Database table:
login successful, indexpage is displayed:
If Login
ENG
08:43 PM
28-10-2022

Login Page:


Login and Registration Project U
localhost / 127.0.0.1 / login | ph
Register
geeksforgeeks.org/login-and-registration-project-using-flask-and-mysql/
Gmail
YouTube
Maps
HTML
CSS
JavaScript
Write & Earn
Interview Preparation
PHP
Bootstrap
NodeJS
ReactJS
AngularJS
Bulma
Foundation
React Desktop
jQuery UI
jQuery Mobi
Output: Login pa
Login
Enter Your Username
Enter Your Password
Sign In
Don't have an account? Sign Up here
ENG
08:36 PM
28-10-2022