Assignment -2

IBM CLOUD DB2

Assignment Date

Student Name Student Roll Number Maximum Marks

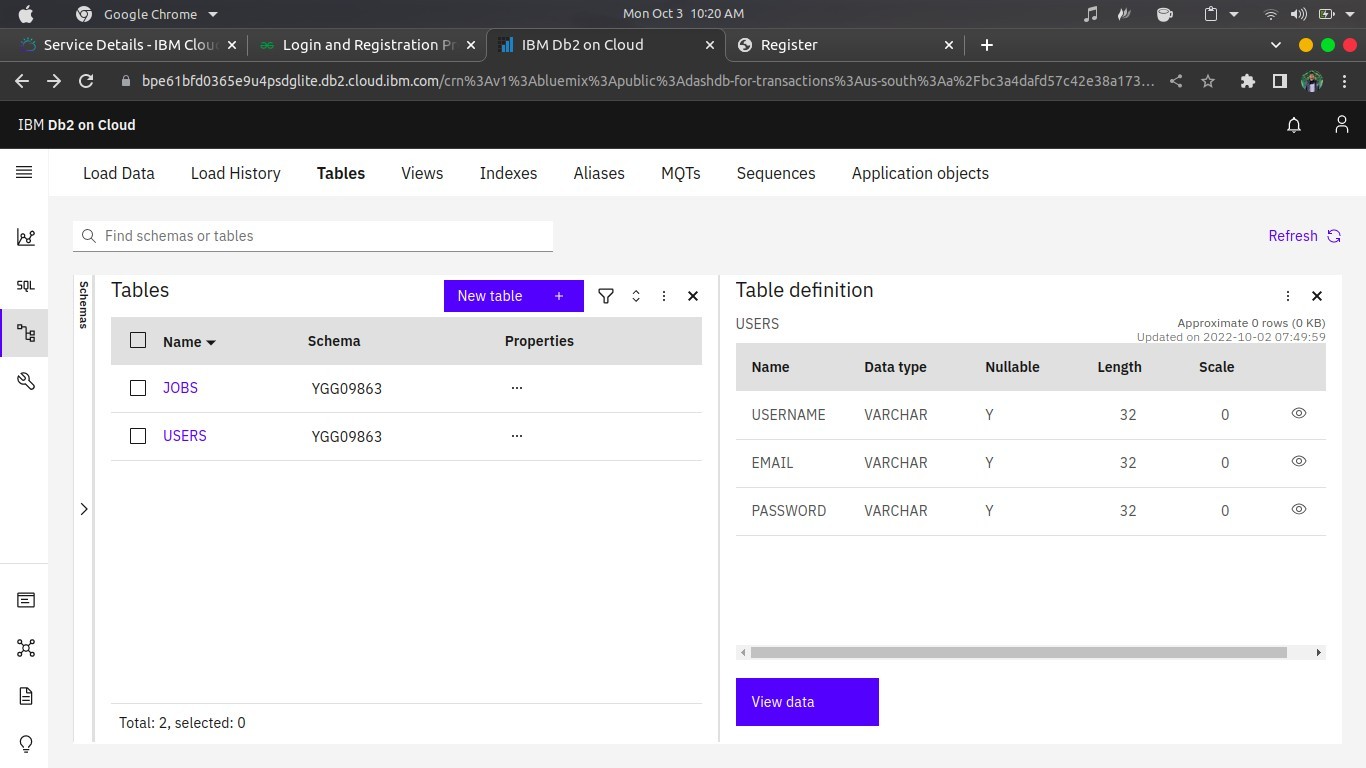
29 September 2022

R.V.Akash

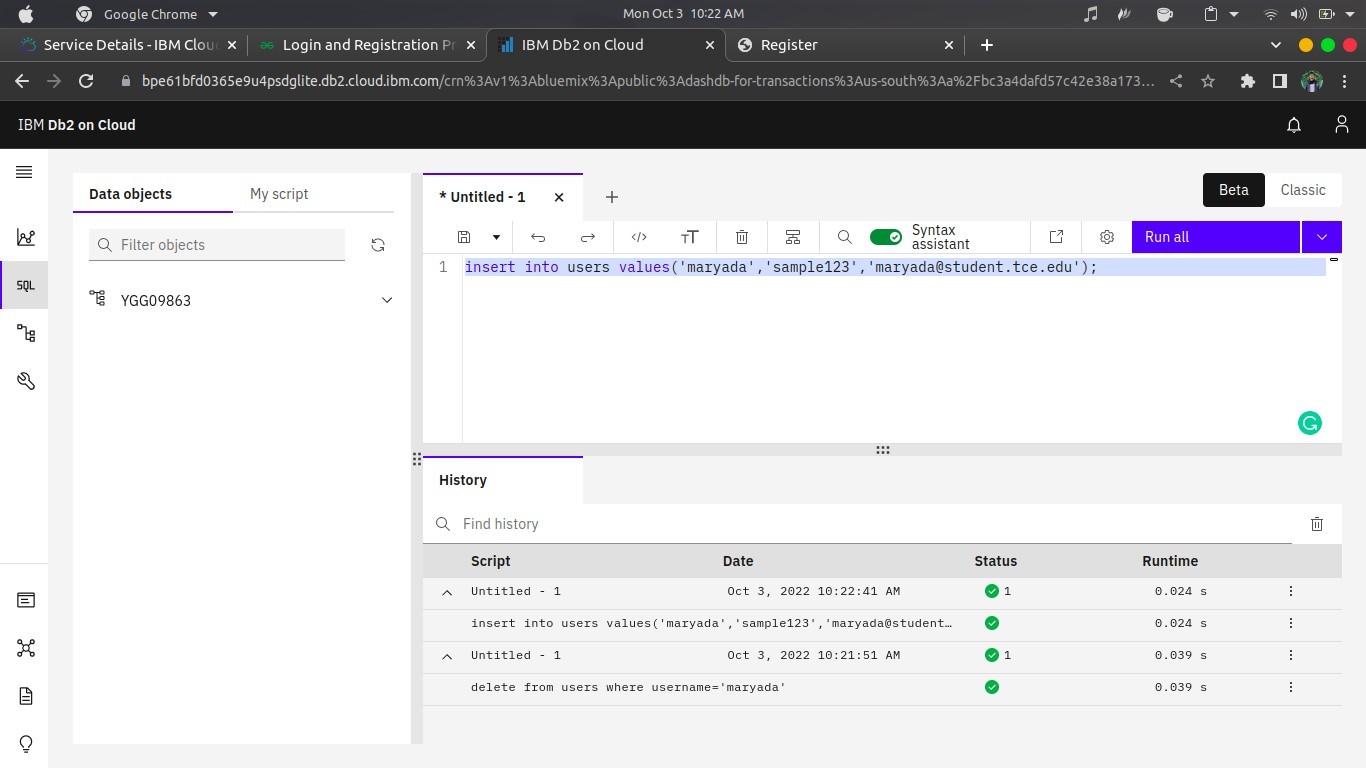
310619106007

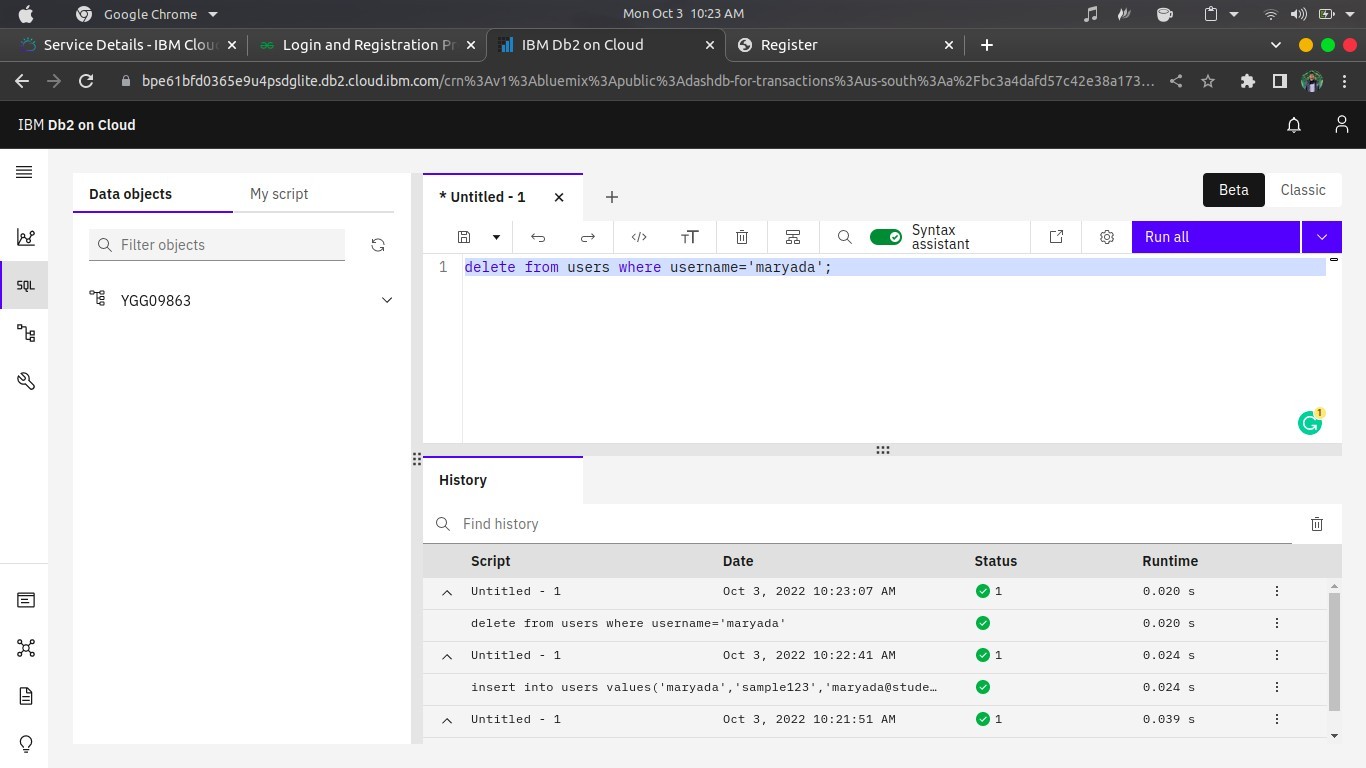
2 Marks

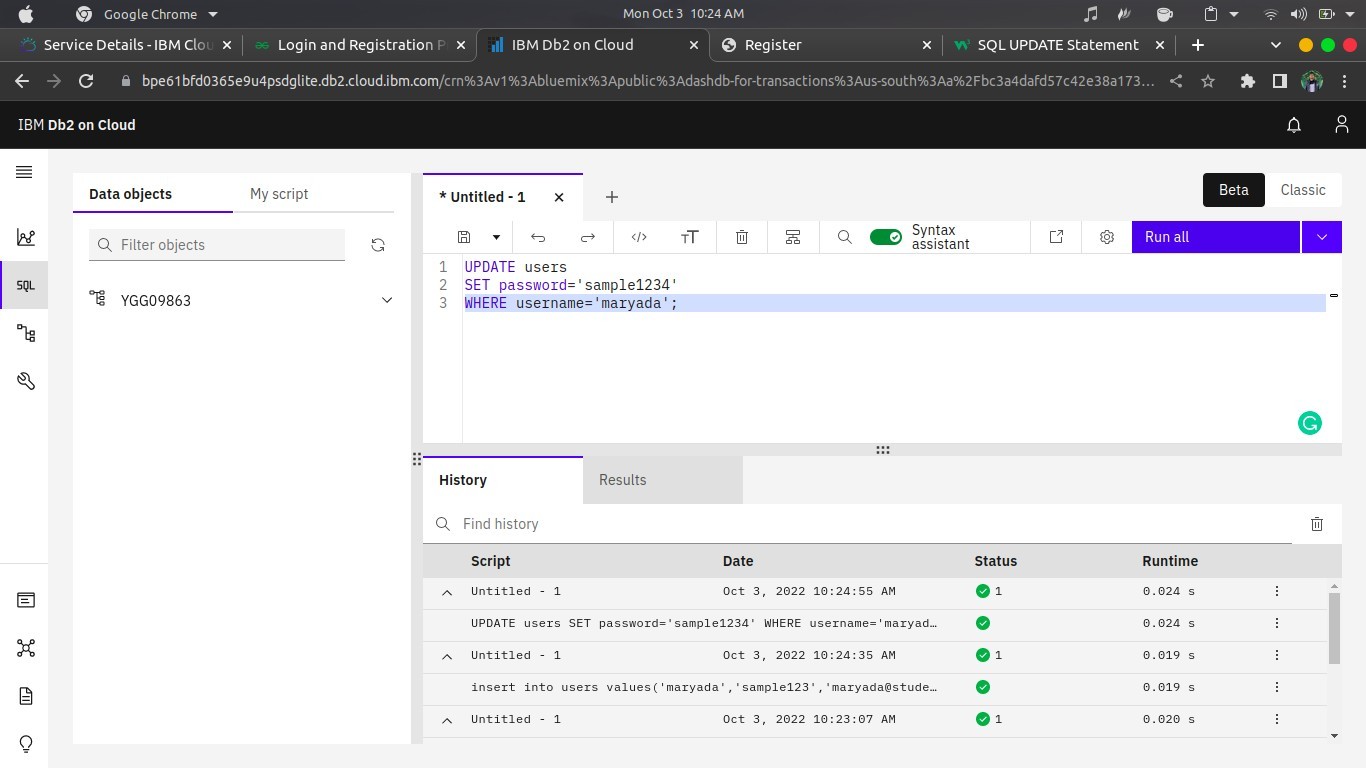
1. Create User table with user with email, username and password.



1. Perform UPDATE,DELETE Queries with user table







1. Connect python code to db2. (Done in question 4)
2. 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

**app.py:**

#!/usr/bin/env python3 # -\*- coding: utf-8 -\*-

"""

Created on Sun Oct 2 12:32:54 2022

@author: maryada """

from flask import Flask,redirect,request,render\_template,url\_for,session import ibm\_db

import re

app=Flask( name ) app.secret\_key='a'

conn=ibm\_db.connect("DATABASE=bludb;HOSTNAME=9938aec0-8105-433e-8bf9- 0fbb7e483086.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32459;Security=SSL;SSL ServerCertificate=DigiCertGlobalRootCA.crt;UID=ygg09863;PWD=dQXLECjtaCqXsJUt;","","")

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

global userid; 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=? 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("index.html", msg=msg) else :

msg="Incorrect username and 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'] email=request.form['email'] password=request.form['password']

sql="SELECT \* from users 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:

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 users 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 logged in!"

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')

**templates folder:**

**index.html**

<!-- Store this code in 'index.html' file inside the 'templates' folder-->

<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">

page...

</div>

</div>

</body>

<div class="header">

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

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

<h1 class="bottom">

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

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

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

</html>

**login.html:**

<!-- Store this code in 'login.html' file inside the 'templates' folder -->

<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">

<div class="msg">{{ msg }}</div>

<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>

**register.html:**

<!-- Store this code in 'register.html' file inside the 'templates' folder -->

<html>

<head>

<meta charset="UTF-8">

<title> Register </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">Register</h1>

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

<h2 class="word">

<form action="{{ url\_for('register') }}" method="post">

<div class="msg">{{ msg }}</div>

<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>

**static folder:**

**style.css**

/\* Store this code in 'style.css' file inside the 'static' folder\*/

.header{

padding: 5px 120px; width: 150px; height: 70px;

background-color: #236B8E;

}

.border{

padding: 80px 50px; width: 400px; height: 450px;

border: 1px solid #236B8E; border-radius: 0px; background-color: #9AC0CD;

}

.btn {

padding: 10px 40px; background-color: #236B8E;

color: #FFFFFF; font-style: oblique; font-weight: bold; border-radius: 10px;

}

.textbox{

padding: 10px 40px; background-color: #236B8E; text-color: #FFFFFF;

border-radius: 10px;

}

::placeholder {

color: #FFFFFF; opacity: 1;

font-style: oblique; font-weight: bold;

}

.word{

}

color: #FFFFFF; font-style: oblique; font-weight: bold;

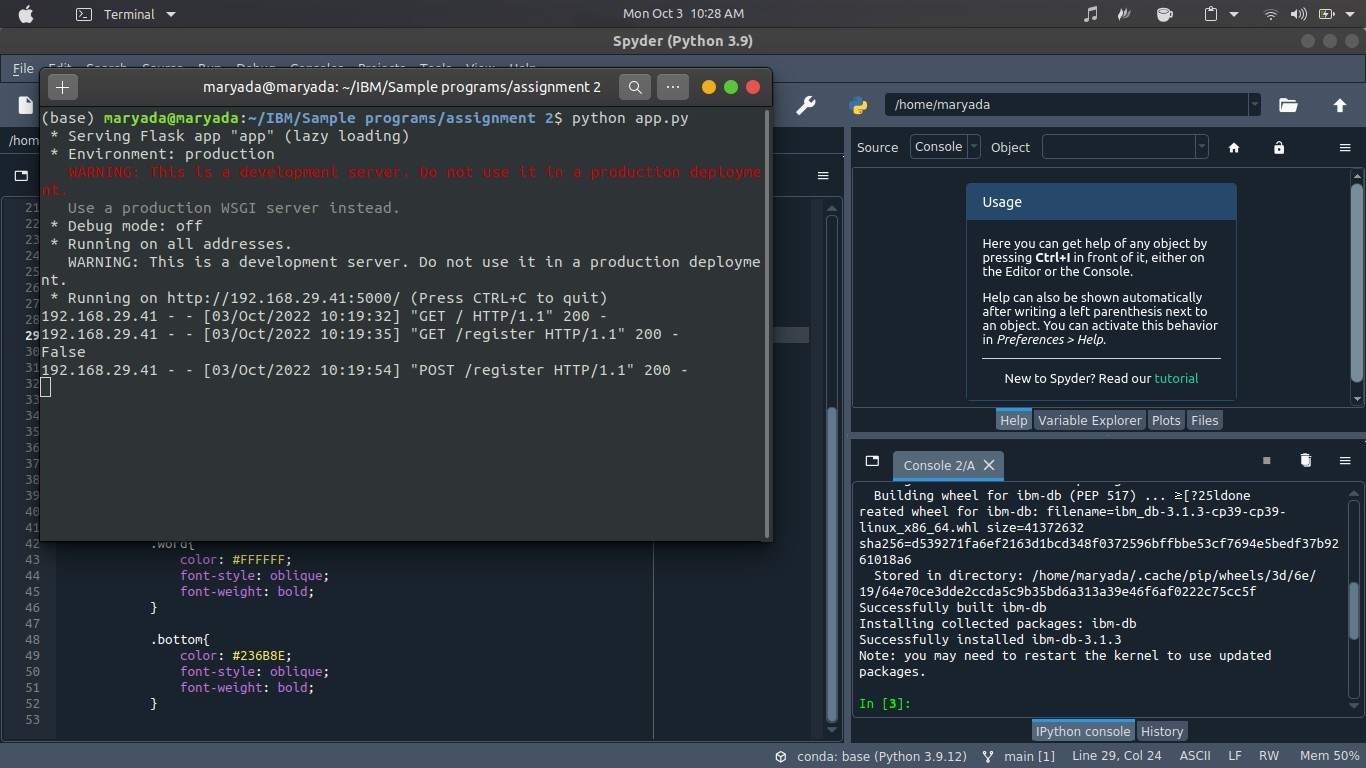
.bottom{

color: #236B8E; font-style: oblique; font-weight: bold;

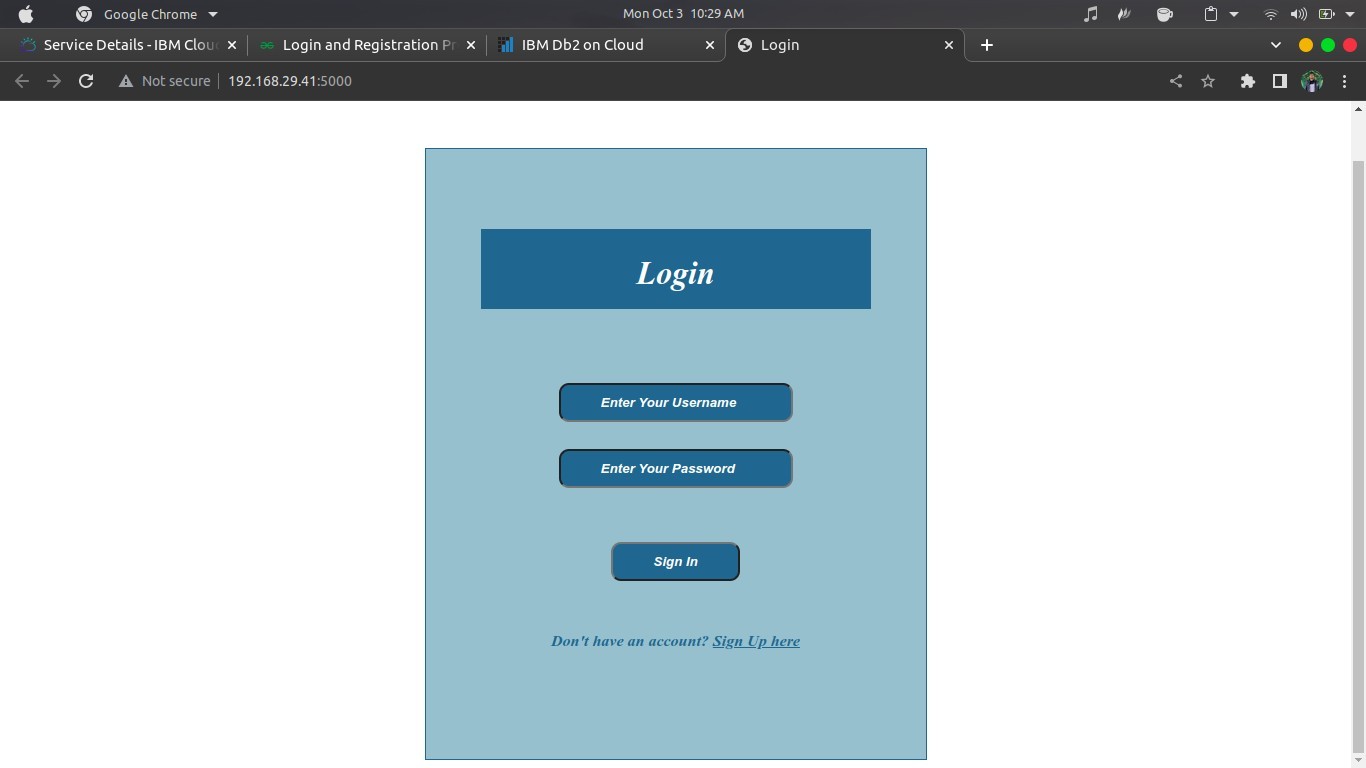
}

**Output:**

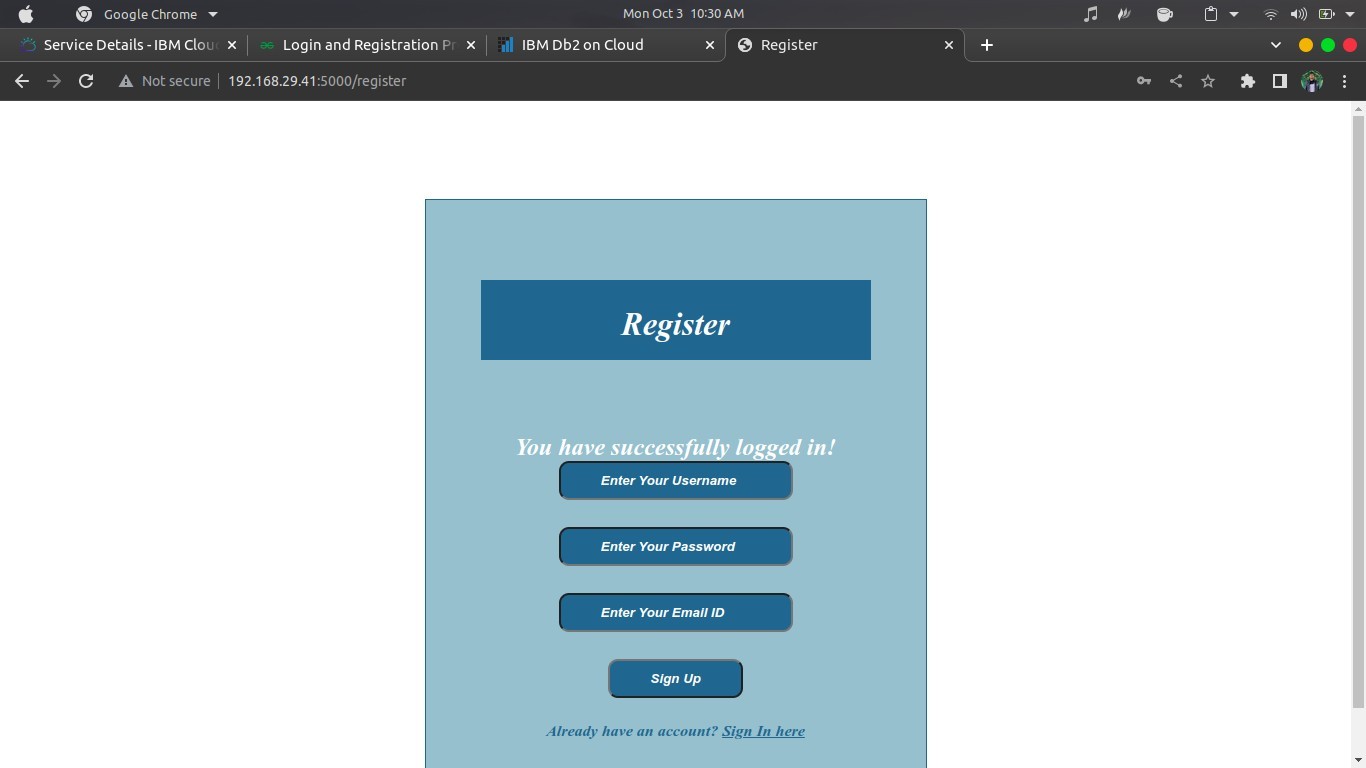
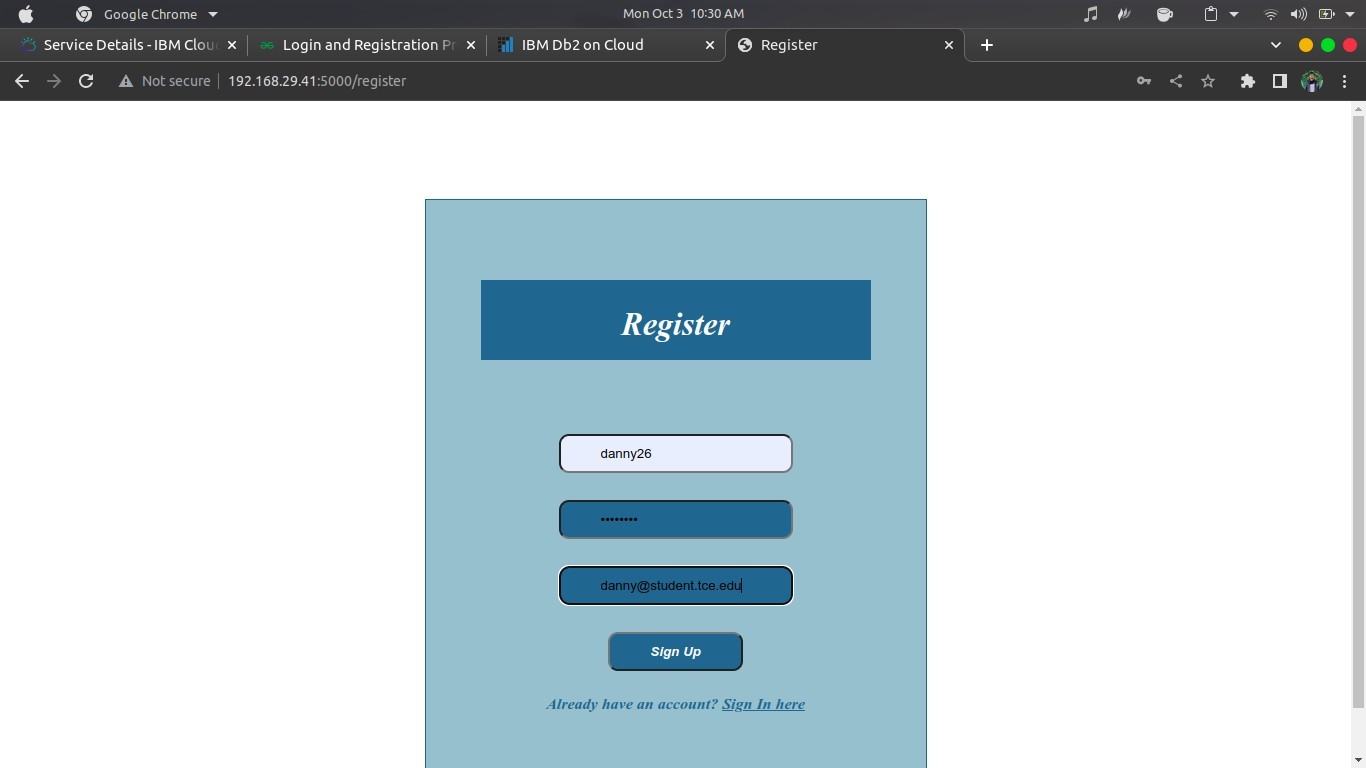
**Start the application:**

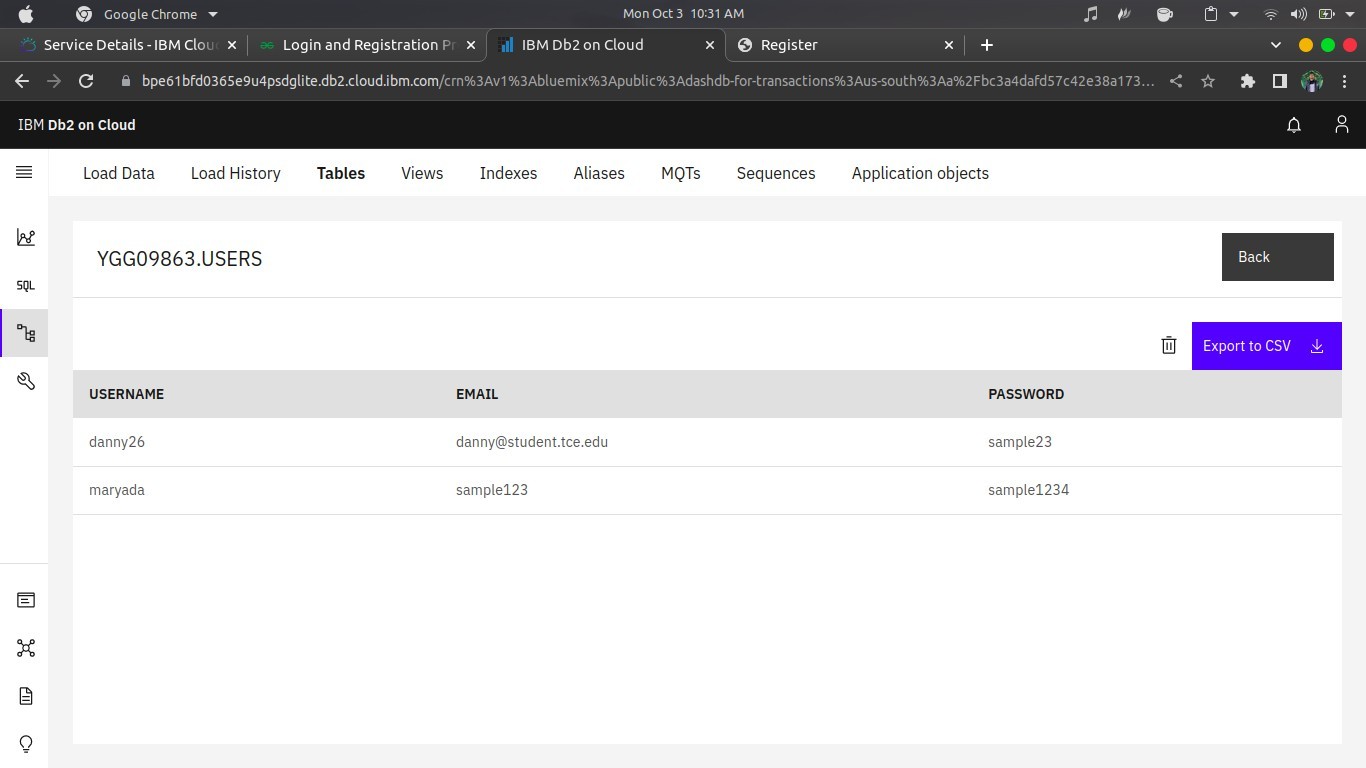


We are invited with login page.

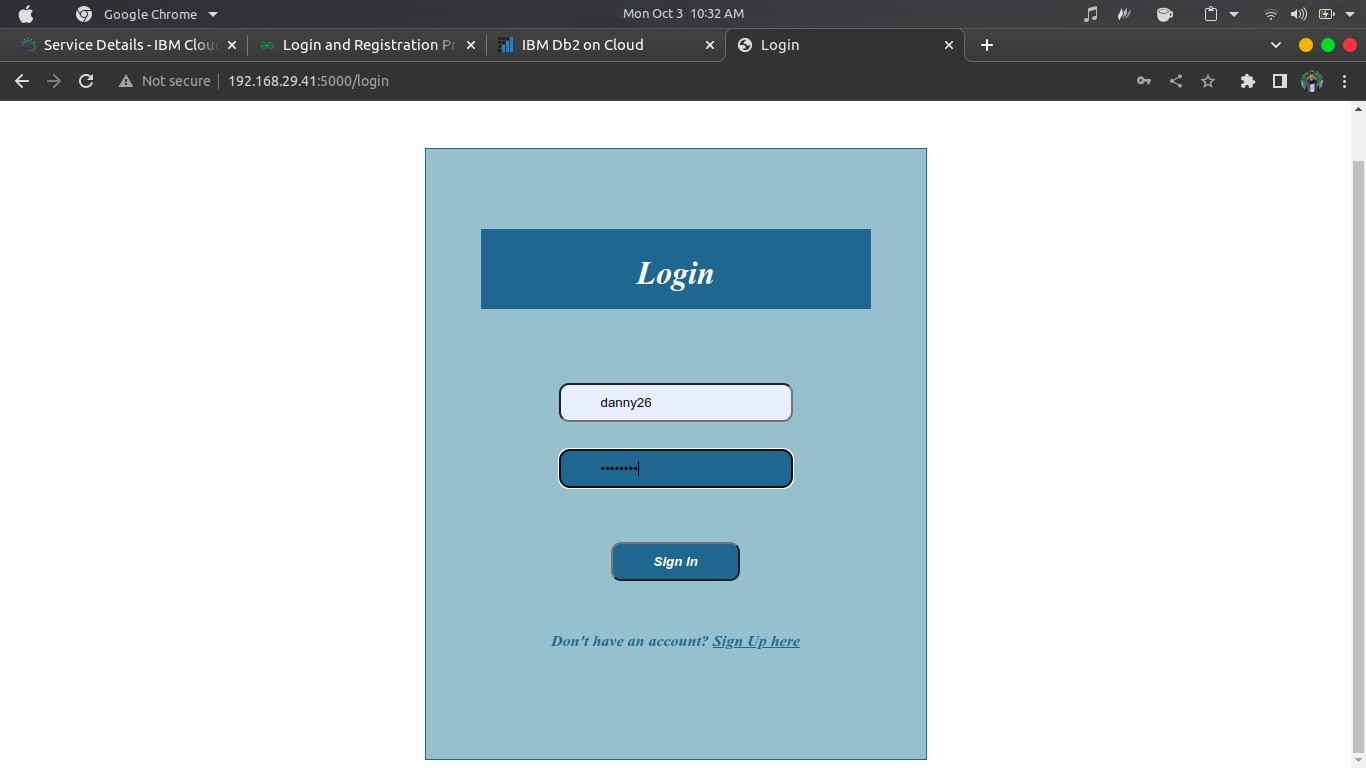


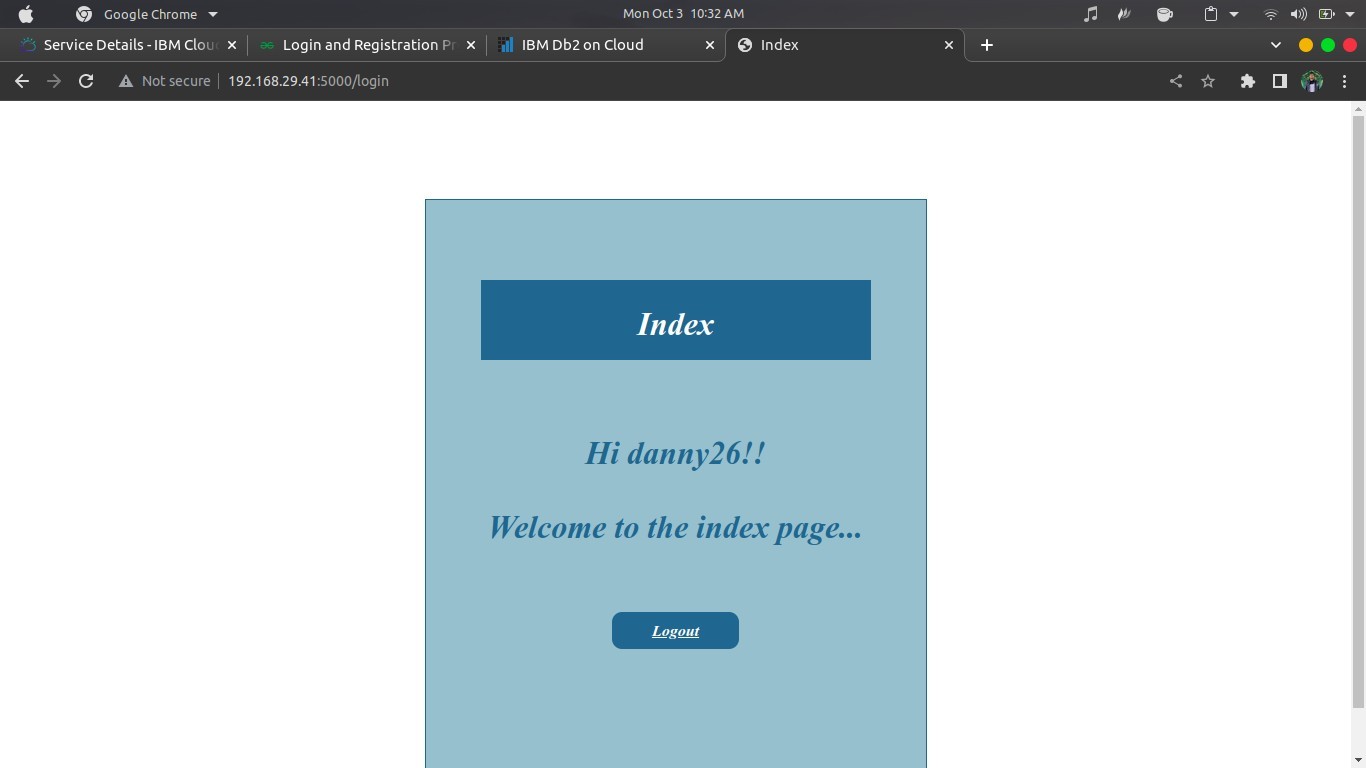
Registration:





**Login and Logout:**





**Logout:**

