Assignment-3

Team id	PNT2022TMID49572
PROJECT NAME	PERSONAL EXPENSE TRACKER APPLICATION
NAME	Jeffrey D Daniel Victor
ROLL NO	950019104017

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

```
CREATE TABLE user(email varchar(50) not null,    username
                  varchar(20) not null,     roll_number int
                  not null,     password varchar(20) not
                  null)

INSERT INTO user(email, username, roll_number, password)

                  VALUES('jeffrey@gmail.com','jeffrey12','4017','jeffrey')
```

2.Perform UPDATE,DELETE Queries with user table

```
UPDATE user SET username='jeffrey' WHERE email= 'jeffrey@gmail.com'

DELETE FROM user WHERE username = 'jeffrey'
```

3.Connect python code to db2.

```
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=54a2f15b-5c0f-46df-
8954-
7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32733;Secur
ity=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=hgm40493;PWD=M
yVIfYf5WrLQF6tG;","")
```

4.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>
	<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:

```
<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>
```

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 Our
page...
                </h1></br></br></br>
                <a href="{{ url_for('logout') }}" class="btn">Logout</a>
        </div>
        </div>
    </body>
</html>
```

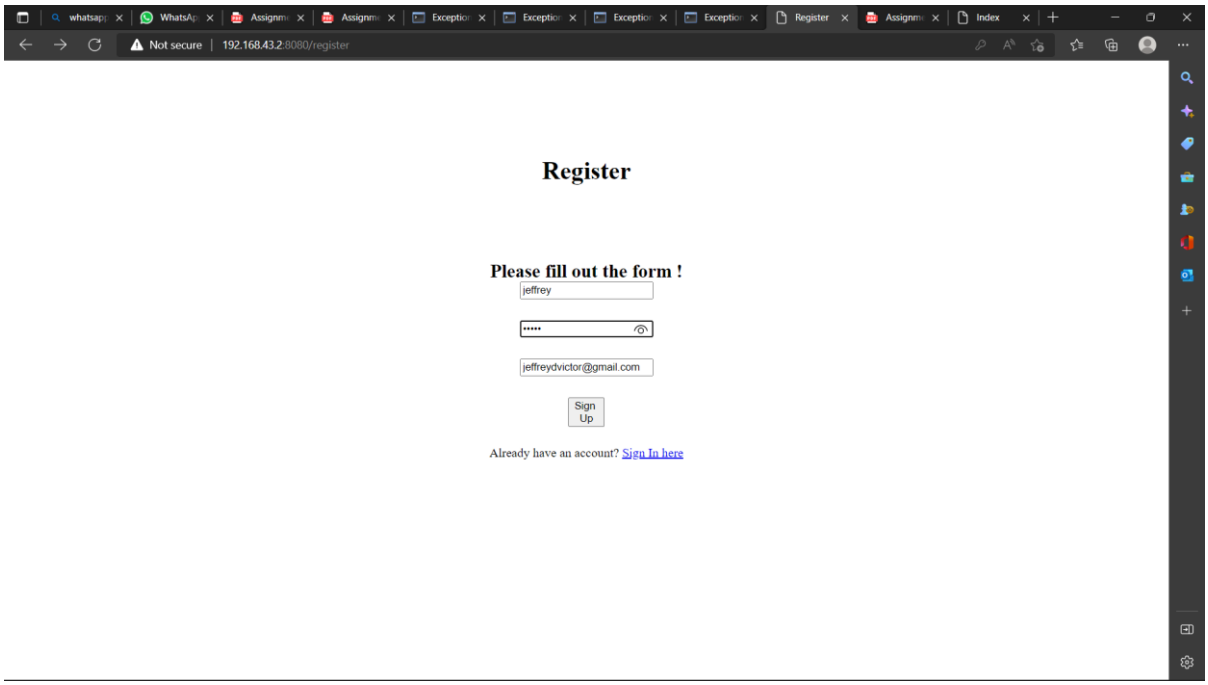
app.py:

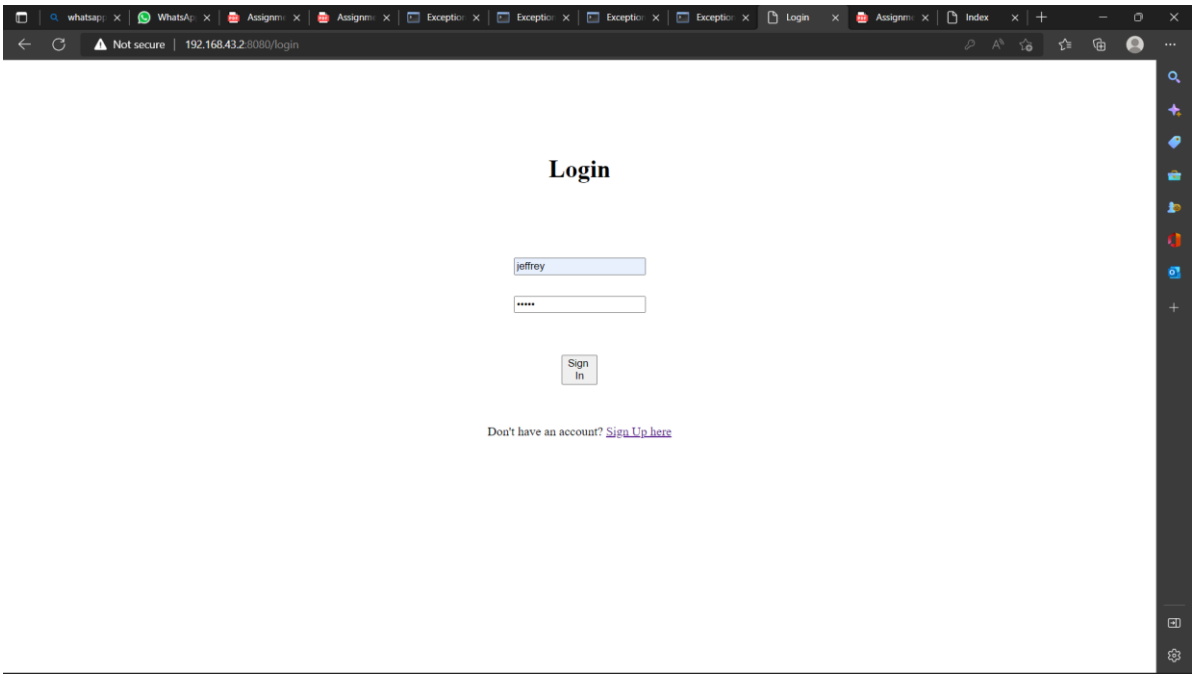
```
from flask import Flask, render_template, request, redirect, url_for, session

import ibm_db import re


app = Flask(__name__) app.secret_key

= 'a'

conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=54a2f15b-5c0f-46df-8954-
7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32733;Security=SS
L;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=hgm40493;PWD=MyVIfYf5WrL
QF6tG;","")




@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']

      stmt = ibm_db.prepare(conn,'SELECT * FROM users WHERE username = ? AND
password = ?')

      ibm_db.bind_param(stmt,1,username)        ibm_db.bind_param(stmt,2,password)

ibm_db.execute(stmt)

      account = ibm_db.fetch_assoc(stmt)

if account:
```

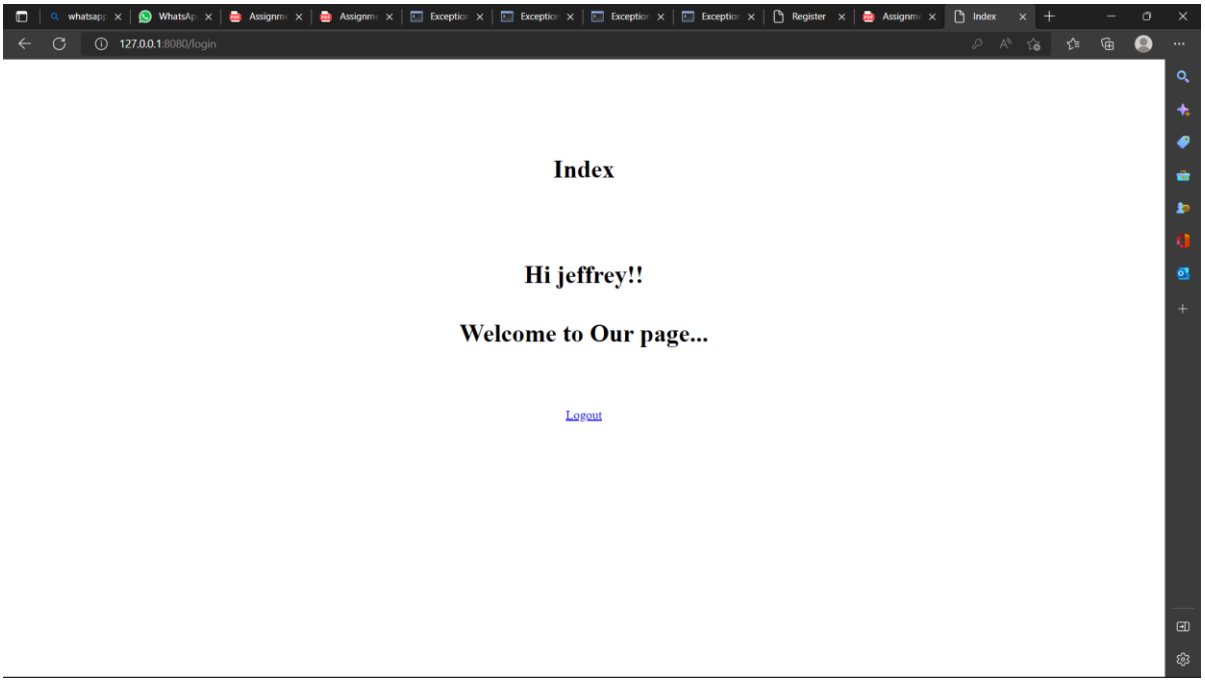
```
        session['loggedin'] = True
session['username'] = account['USERNAME']
msg = 'Logged in successfully !'
        return render_template('index.html', msg = msg)
else:
        msg = 'Incorrect username / password !'
return render_template('login.html', msg = msg)
@app.route('/logout') def logout():
   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']
      stmt = ibm_db.prepare(conn,'SELECT * FROM users WHERE username = ?')
ibm_db.bind_param(stmt,1,username)         ibm_db.execute(stmt)
      account = ibm_db.fetch_assoc(stmt)
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:
```

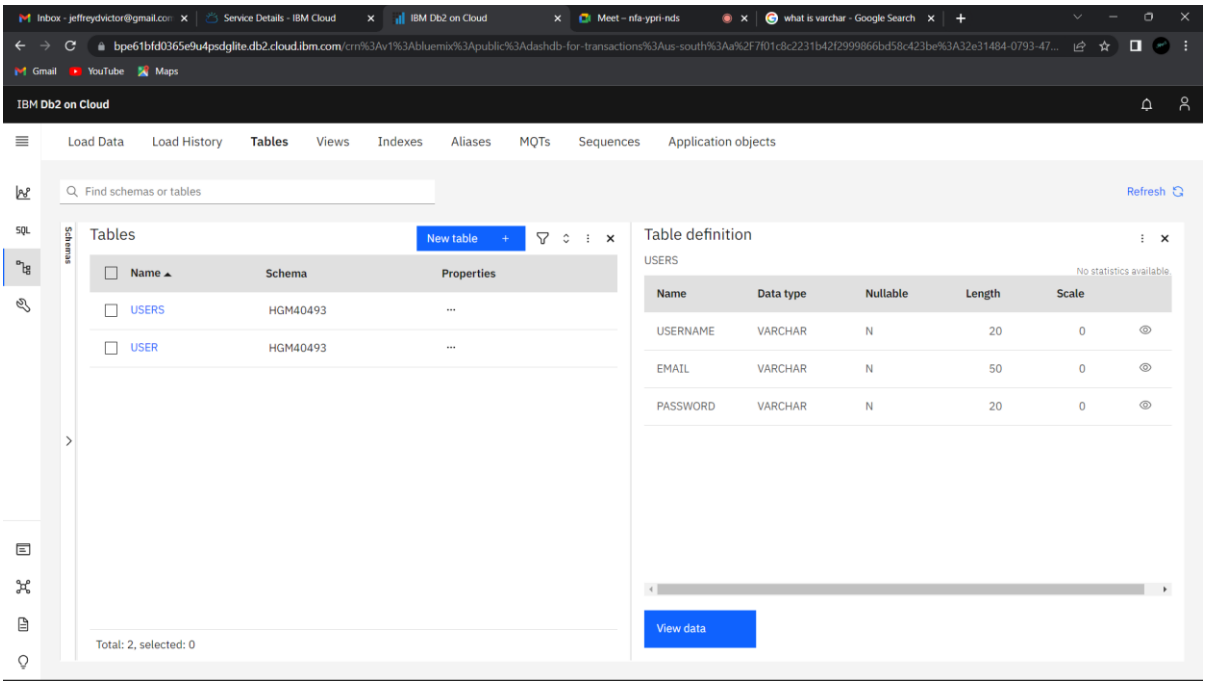
```
        msg = 'Please fill out the form !'
else:
        prep_stmt = ibm_db.prepare(conn,"INSERT INTO users VALUES(?, ?, ?)")
ibm_db.bind_param(prep_stmt, 1, username)          ibm_db.bind_param(prep_stmt,
2, email)          ibm_db.bind_param(prep_stmt, 3, password)
ibm_db.execute(prep_stmt)

        msg = 'You have successfully registered !'
elif request.method == 'POST':        msg =
'Please fill out the form !'      return

render_template('register.html', msg = msg)


if __name__ == '__main__':
   app.debug = True
app.run(host='0.0.0.0',port=8080)
```

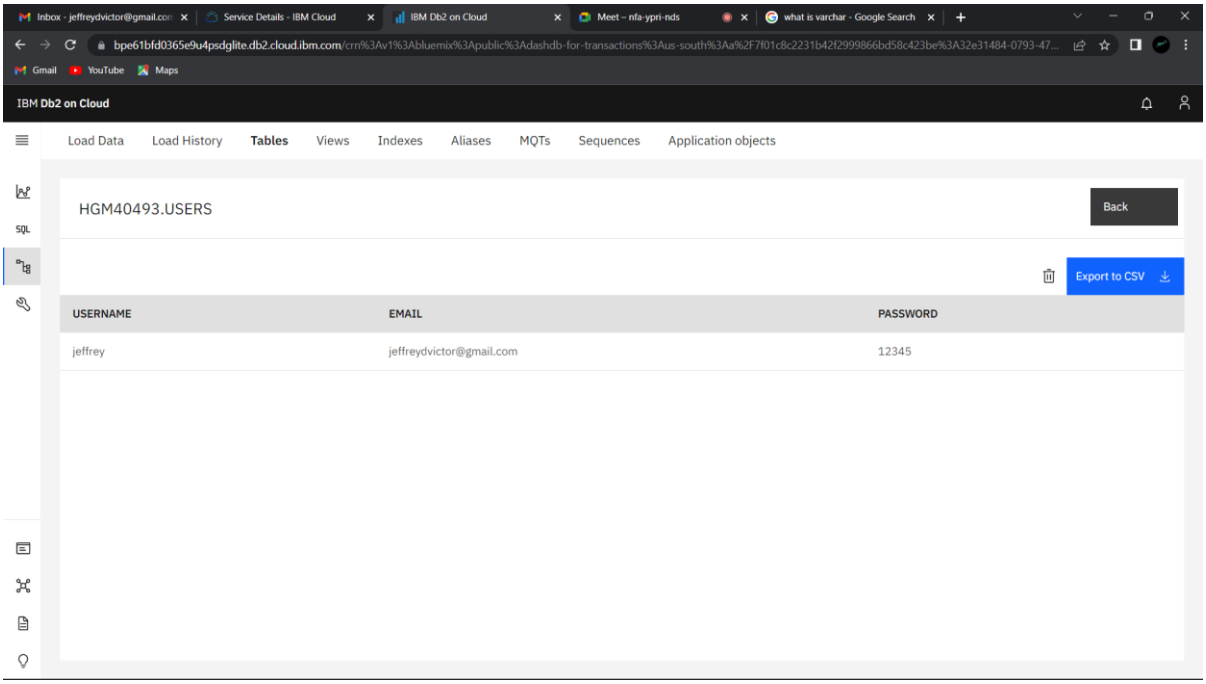
Output:


Not secure | 192.168.43.2:8080/register
Register
Please fill out the form !
jeffrey
jeffreydvictor@gmail.com
Sign Up
Already have an account? Sign In here


Not secure | 192.168.43.2:8080/login
Login
jeffrey
Sign In
Don't have an account? Sign Up here


127.0.0.1:8080/login
Index
Hi jeffrey!!
Welcome to Our page...
Logout


IBM Db2 on Cloud
Load Data
Load History
Tables
Views
Indexes
Aliases
MQTs
Sequences
Application objects
Find schemas or tables
Refresh
Tables
New table
Name
Schema
Properties
USERS
HGM40493
USER
HGM40493
Total: 2, selected: 0
Table definition
USERS
No statistics available
Name
Data type
Nullable
Length
Scale
USERNAME
VARCHAR
N
20
0
EMAIL
VARCHAR
N
50
0
PASSWORD
VARCHAR
N
20
0
View data


IBM Db2 on Cloud
Load Data
Load History
Tables
Views
Indexes
Aliases
MQTs
Sequences
Application objects
HGM40493.USERS
Back
Export to CSV
USERNAME
EMAIL
PASSWORD
jeffrey
jeffreydvictor@gmail.com
12345