ASSIGNMENT-2

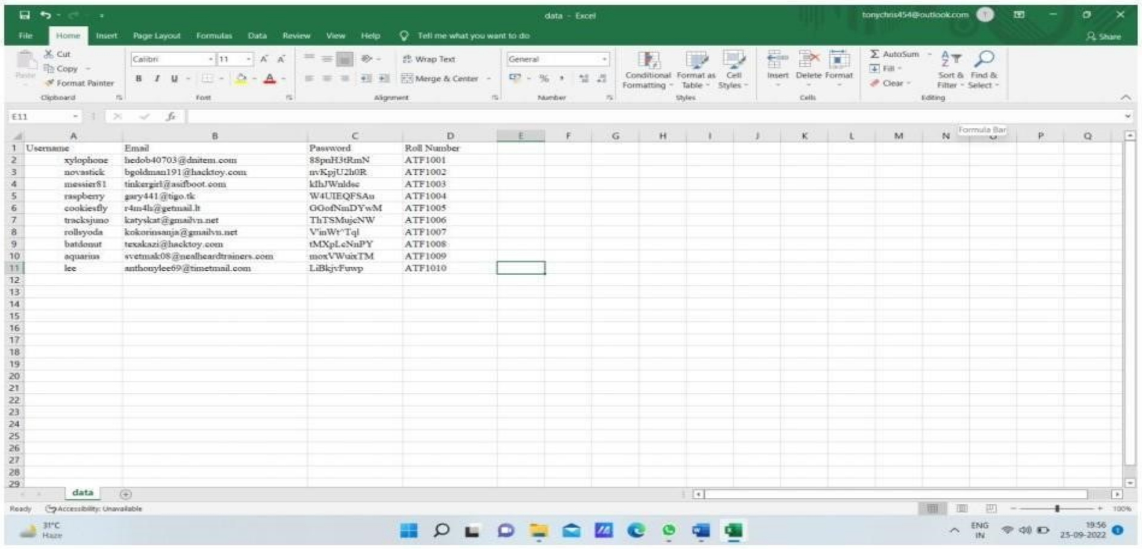
Assignment Date	19 September 2022
Student Name	M.Saraswathi
Student Roll Number	820419104062
Team ID	PNT2022TMID32929
Maximum Marks	2 Marks

Question-1:

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

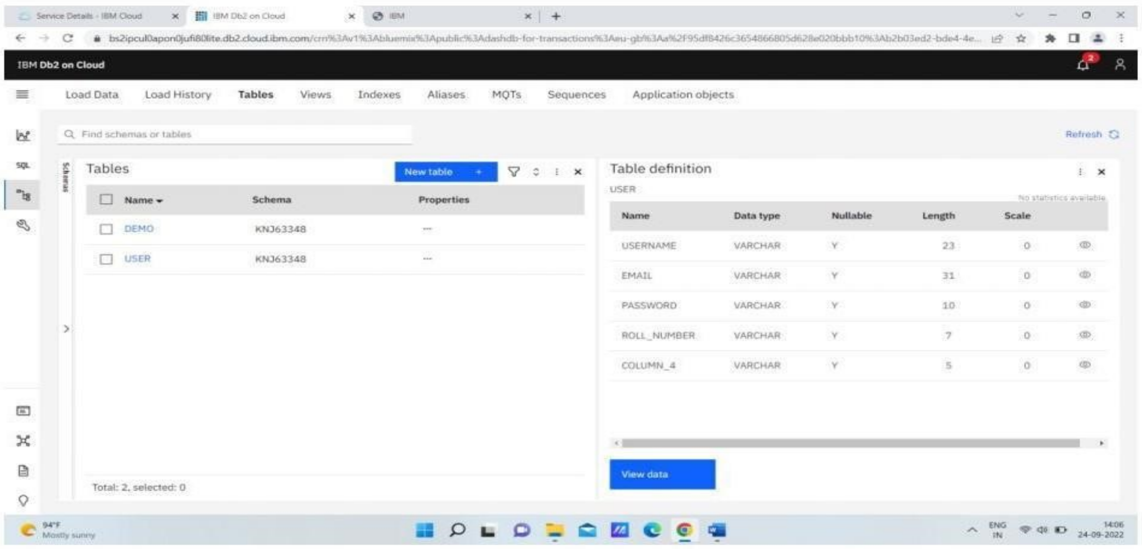
Solution:

Excel comma file



Username	Email	Password	Roll Number
xylophone	hedob40703@dnitem.com	88pnH3tRmN	ATF1001
novastick	bgoldman191@hacktoy.com	nvKpjU2h0R	ATF1002
messier81	tinkergirl@asifboot.com	klhJWnldsc	ATF1003
raspberry	gary441@tigo.tk	W4UIEQFSAu	ATF1004
cookiesfly	r4m4h@getmail.lt	GGofNmDYwM	ATF1005
tracksjuno	katyskat@gmailvn.net	ThTSMujcNW	ATF1006
rollsyoda	kokorinsanja@gmailvn.net	V'inWt^Tql	ATF1007
batdonut	texakazi@hacktoy.com	tMXpLcNnPY	ATF1008
aquarius	svetmak08@nealheardtrainers.com	moxVWuixTM	ATF1009
lee	anthonylee69@timetmail.com	LiBkjvFuwp	ATF1010

User table in Db2



Tables

Name	Schema	Properties
DEMO	KNJ63348	---
USER	KNJ63348	---

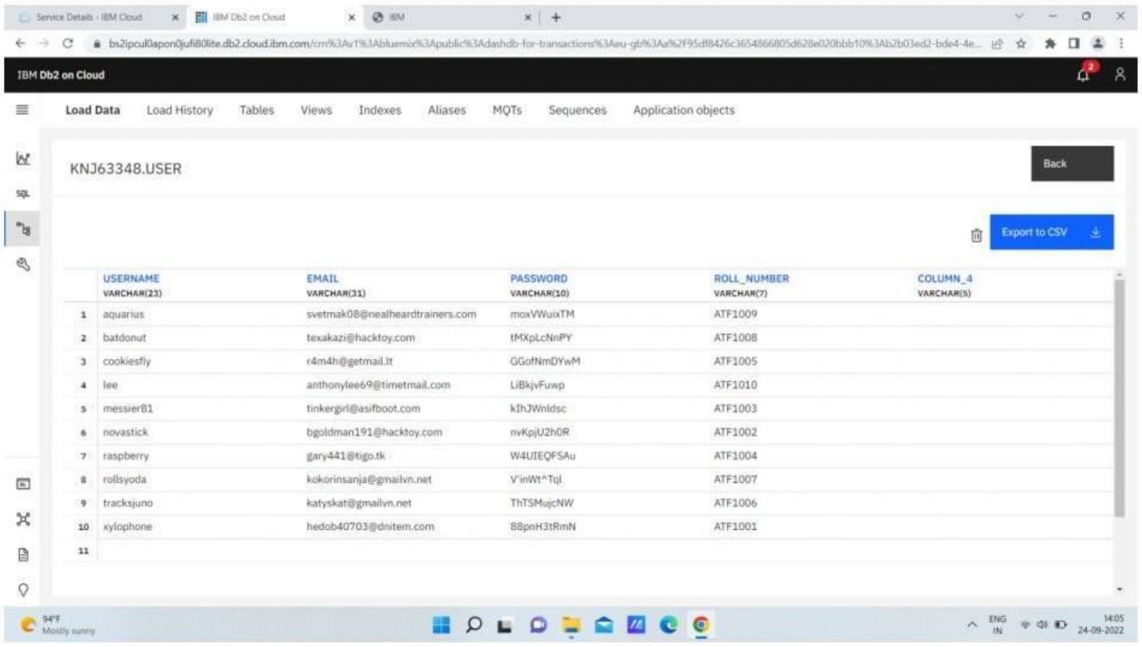
Total: 2, selected: 0

Table definition

USER

Name	Data type	Nullable	Length	Scale
USERNAME	VARCHAR	Y	23	0
EMAIL	VARCHAR	Y	31	0
PASSWORD	VARCHAR	Y	10	0
ROLL_NUMBER	VARCHAR	Y	7	0
COLUMN_4	VARCHAR	Y	5	0

Data in User table



KNJ63348.USER

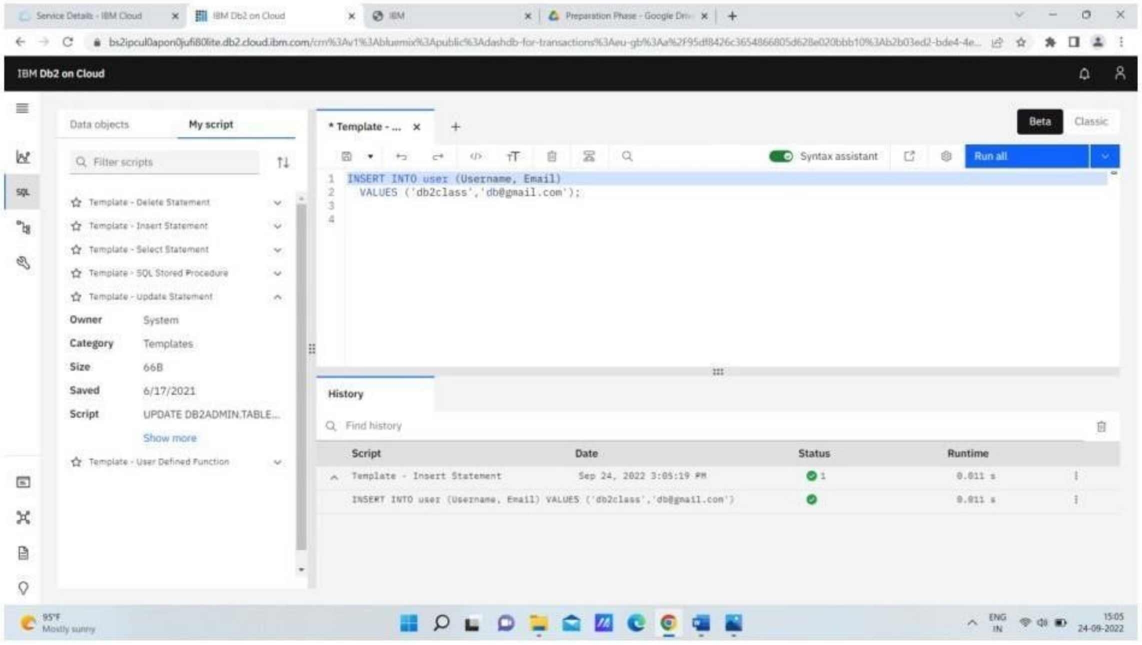
	USERNAME VARCHAR(23)	EMAIL VARCHAR(31)	PASSWORD VARCHAR(10)	ROLL_NUMBER VARCHAR(7)	COLUMN_4 VARCHAR(5)
1	aquarius	svetmak08@nealheardtrainers.com	moxVWuixTM	ATF1009	
2	batdonut	texakazi@hacktoy.com	tMXpLcNnPY	ATF1008	
3	cookiesfly	r4m4h@getmail.lt	GGofNmDYwM	ATF1005	
4	lee	anthonylee69@timetmail.com	LiBkjvFuwp	ATF1010	
5	messier81	tinkergirl@asifboot.com	kIhJWnldsc	ATF1003	
6	novastick	bgoldman191@hacktoy.com	nvKpjU2h0R	ATF1002	
7	raspberry	gary441@tigo.tk	W4UIEQFSAu	ATF1004	
8	rollsyoda	kokorinsanja@gmailvn.net	V'inWt^Tql	ATF1007	
9	tracksjuno	katyskat@gmailvn.net	ThTSMujcNW	ATF1006	
10	xylophone	hedob40703@dnitem.com	88pnH3tRmN	ATF1001	
11					

Question-2:

Perform INSERT, SELECT, DELETE Queries in user table

Solution:

Insert Query

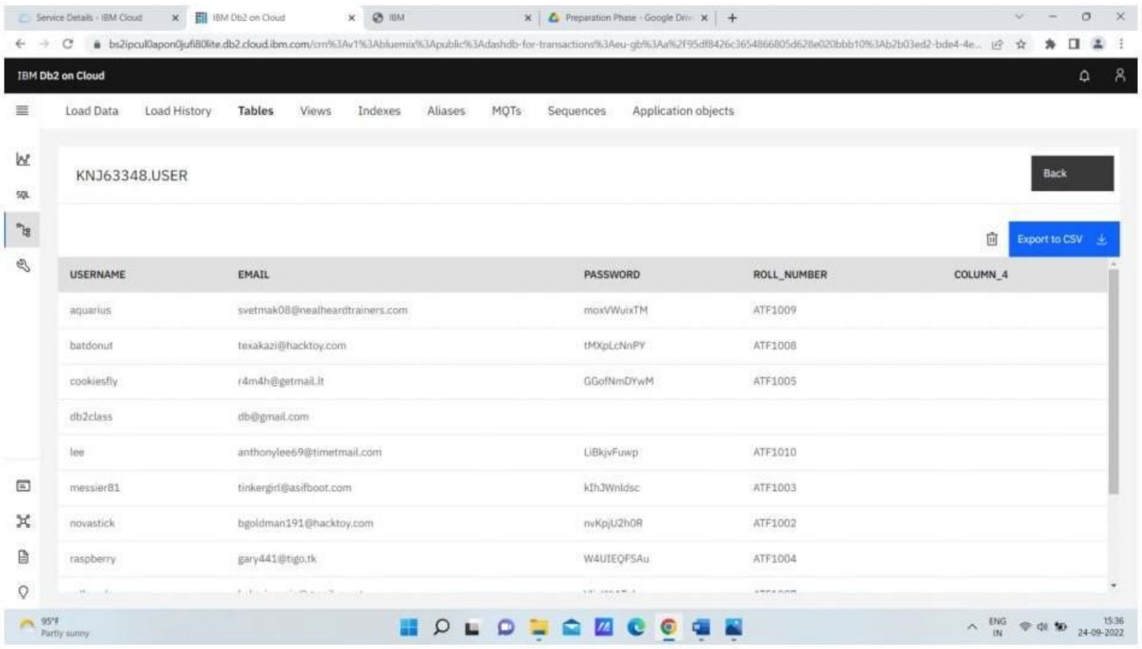


```
INSERT INTO user (Username, Email)
  VALUES ('db2class','db@gmail.com');
```

History

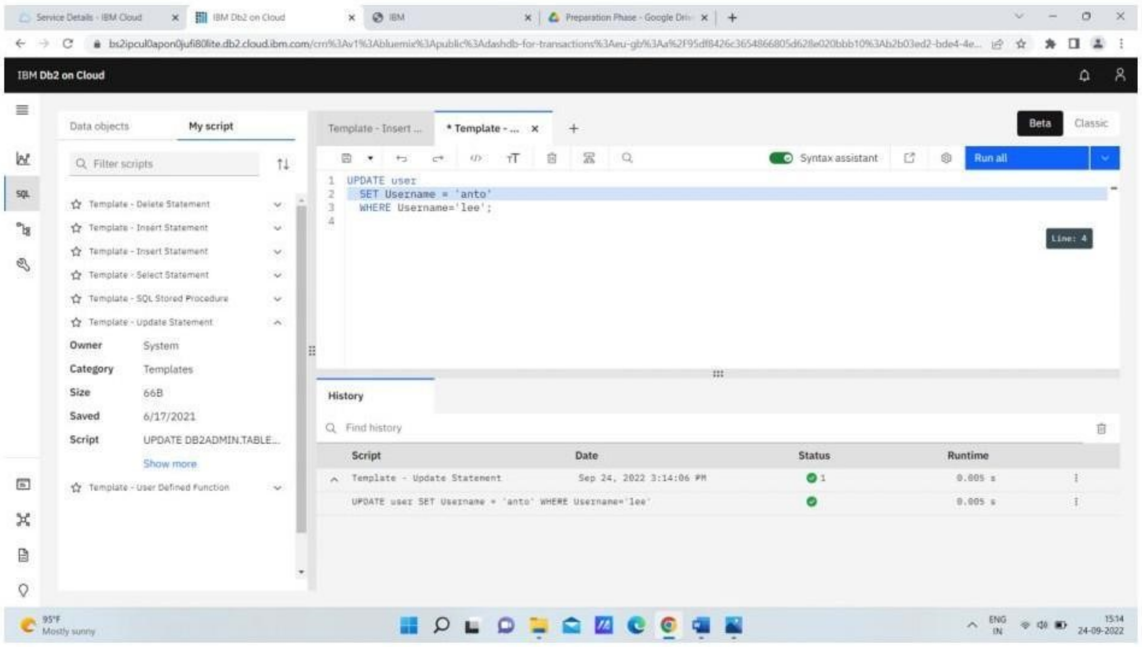
```
Script                                                              Date                      Status   Runtime
Template - Insert Statement                                         Sep 24, 2022 3:05:19 PM   ✓ 1      0.011 s
INSERT INTO user (Username, Email) VALUES ('db2class','db@gmail.com')                         ✓        0.011 s
```

Insert Query Output


KNJ63348.USER

USERNAME	EMAIL	PASSWORD	ROLL_NUMBER	COLUMN_4
aquarius	svetmak08@nealheardtrainers.com	moxVWuixTM	ATF1009	
batdonut	texakazi@hacktoy.com	tMXpLcNnPY	ATF1008	
cookiesfly	r4m4h@getmail.lt	GGofNmDYwM	ATF1005	
db2class	db@gmail.com			
lee	anthonylee69@timetmail.com	LiBkjvFuwp	ATF1010	
messier81	tinkergirl@asifboot.com	kIhJWnldsc	ATF1003	
novastick	bgoldman191@hacktoy.com	nvKpjU2h0R	ATF1002	
raspberry	gary441@tigo.tk	W4UIEQFSAu	ATF1004	

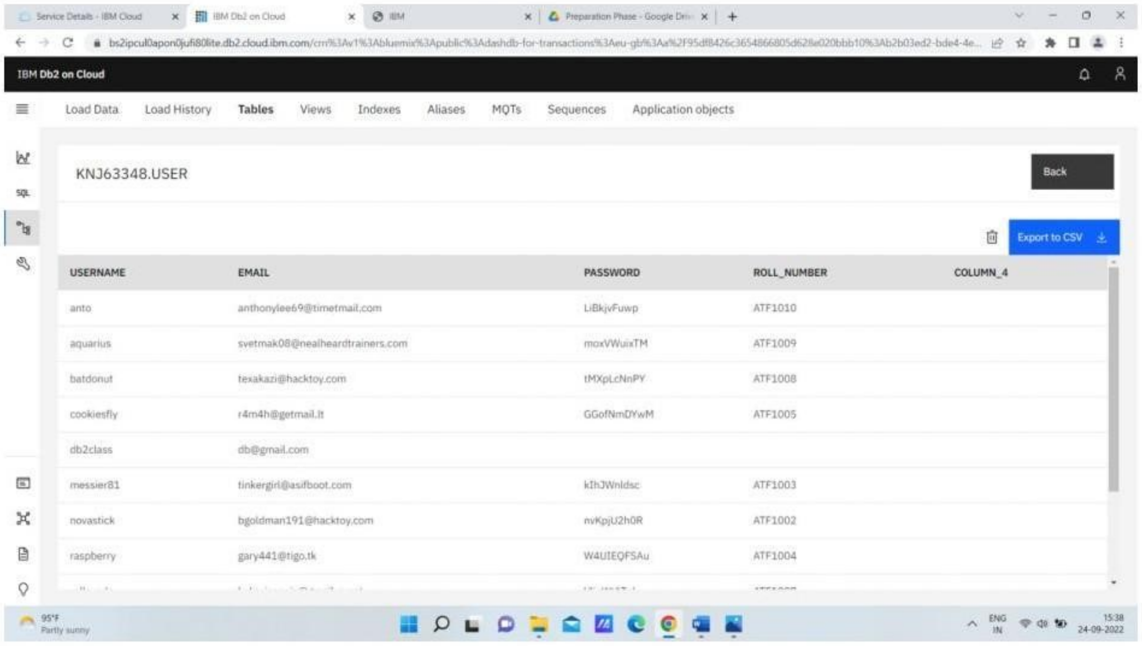
Update Query


```
UPDATE user
  SET Username = 'anto'
  WHERE Username='lee';
```

History

Script	Date	Status	Runtime
Template - Update Statement	Sep 24, 2022 3:14:06 PM	✓ 1	0.005 s
UPDATE user SET Username = 'anto' WHERE Username='lee'		✓	0.005 s

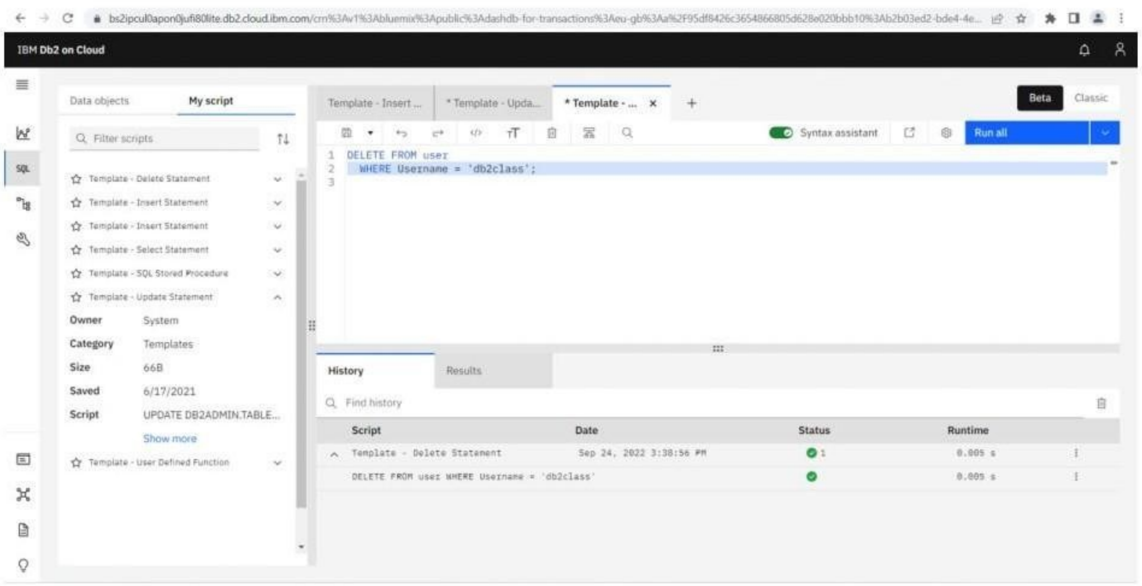
Update Query Output



KNJ63348.USER

USERNAME	EMAIL	PASSWORD	ROLL_NUMBER	COLUMN_4
anto	anthonylee69@timetmail.com	LiBkjvFuwp	ATF1010	
aquarius	svetmak08@nealheardtrainers.com	moxVWuixTM	ATF1009	
batdonut	texakazi@hacktoy.com	tMXpLcNnPY	ATF1008	
cookiesfly	r4m4h@getmail.lt	GGofNmDYwM	ATF1005	
db2class	db@gmail.com			
messier81	tinkergirl@asifboot.com	kIhJWnldsc	ATF1003	
novastick	bgoldman191@hacktoy.com	nvKpjU2h0R	ATF1002	
raspberry	gary441@tigo.tk	W4UIEQFSAu	ATF1004	

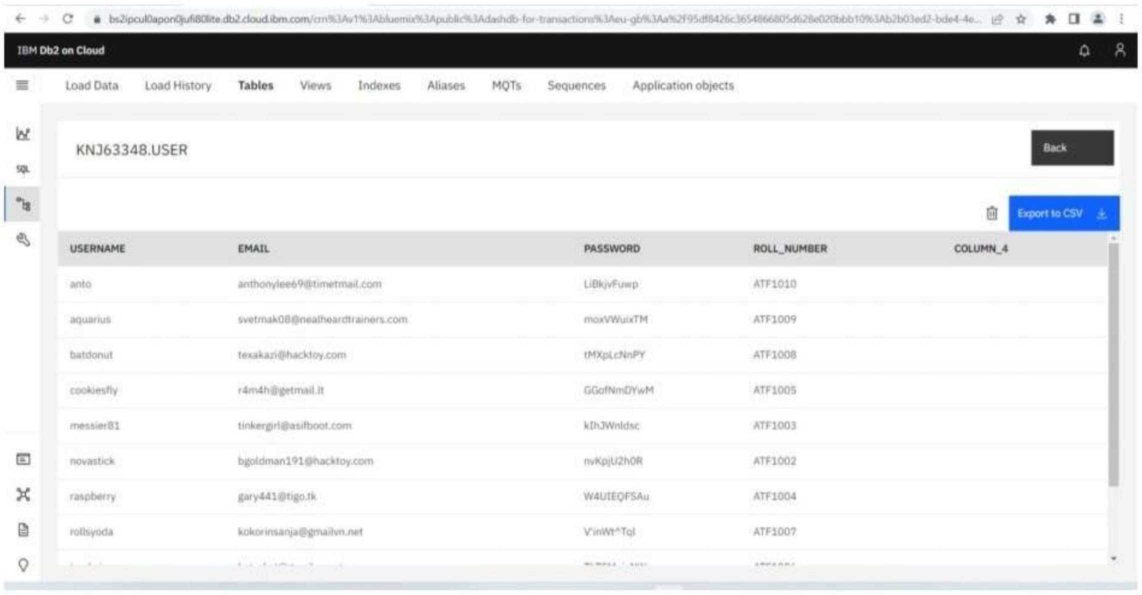
Delete Query



```
DELETE FROM user
  WHERE Username = 'db2class';
```

Script	Date	Status	Runtime
Template - Delete Statement	Sep 24, 2022 3:38:56 PM	✓ 1	0.005 s
DELETE FROM user WHERE Username = 'db2class'		✓	0.005 s

Delete Query Output



KNJ63348.USER

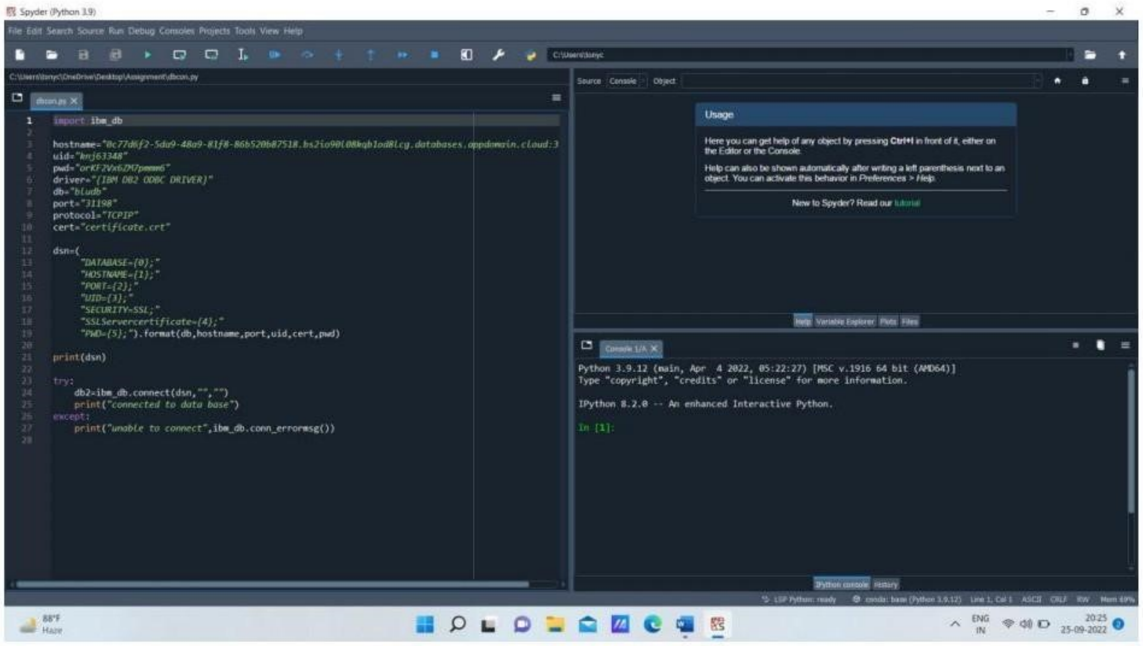
USERNAME	EMAIL	PASSWORD	ROLL_NUMBER	COLUMN_4
anto	anthonylee69@timetmail.com	LiBkjvFuwp	ATF1010	
aquarius	svetmak08@nealheardtrainers.com	moxVWuixTM	ATF1009	
batdonut	texakazi@hacktoy.com	tMXpLcNnPY	ATF1008	
cookiesfly	r4m4h@getmail.lt	GGofNmDYwM	ATF1005	
messier81	tinkergirl@asifboot.com	kIhJWnldsc	ATF1003	
novastick	bgoldman191@hacktoy.com	nvKpjU2h0R	ATF1002	
raspberry	gary441@tigo.tk	W4UIEQFSAu	ATF1004	
rollsyoda	kokorinsanja@gmailvn.net	V'inWt^Tql	ATF1007	

Question-3:

Connect Python to DB2

Solution:

Source Code for Python to DB2 Connection



```python
import ibm_db

hostname="0c77d6f2-5da9-48a9-81f8-86b520b87518.bs2io90l08kqb1od8lcg.databases.appdomain.cloud:3
uid="knj63348"
pwd="orKF2Vx6ZM7pmmm6"
driver="{IBM DB2 ODBC DRIVER}"
db="bludb"
port="31198"
protocol="TCPIP"
cert="certificate.crt"

dsn=(
    "DATABASE={0};"
    "HOSTNAME={1};"
    "PORT={2};"
    "UID={3};"
    "SECURITY=SSL;"
    "SSLServercertificate={4};"
    "PWD={5};").format(db,hostname,port,uid,cert,pwd)

print(dsn)

try:
    db2=ibm_db.connect(dsn,"","")
    print("connected to data base")
except:
    print("unable to connect",ibm_db.conn_errormsg())
```

Usage

Here you can get help of any object by pressing Ctrl+I in front of it, either on the Editor or the Console.

Help can also be shown automatically after writing a left parenthesis next to an object. You can activate this behavior in Preferences > Help.

New to Spyder? Read our tutorial

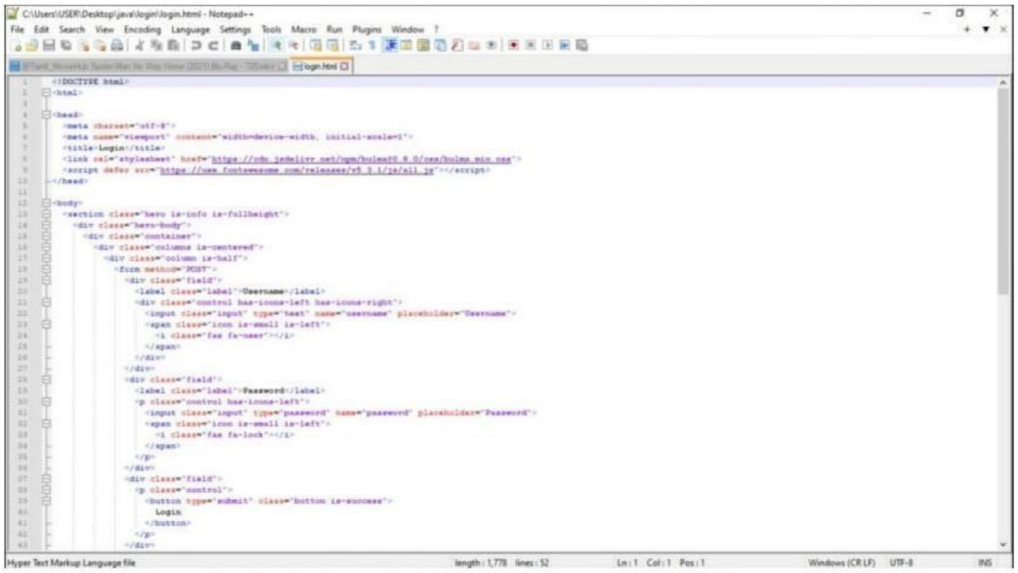
```
Python 3.9.12 (main, Apr  4 2022, 05:22:27) [MSC v.1916 64 bit (AMD64)]
Type "copyright", "credits" or "license" for more information.

IPython 8.2.0 -- An enhanced Interactive Python.

In [1]:
```

Question-4:

Create a flask app with 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

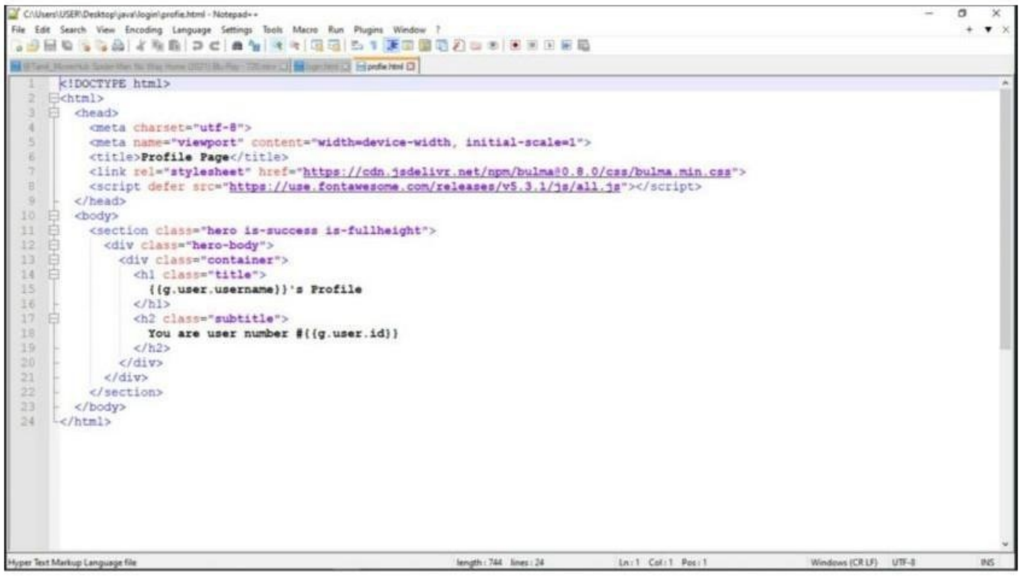
Solution:

Source code for login page



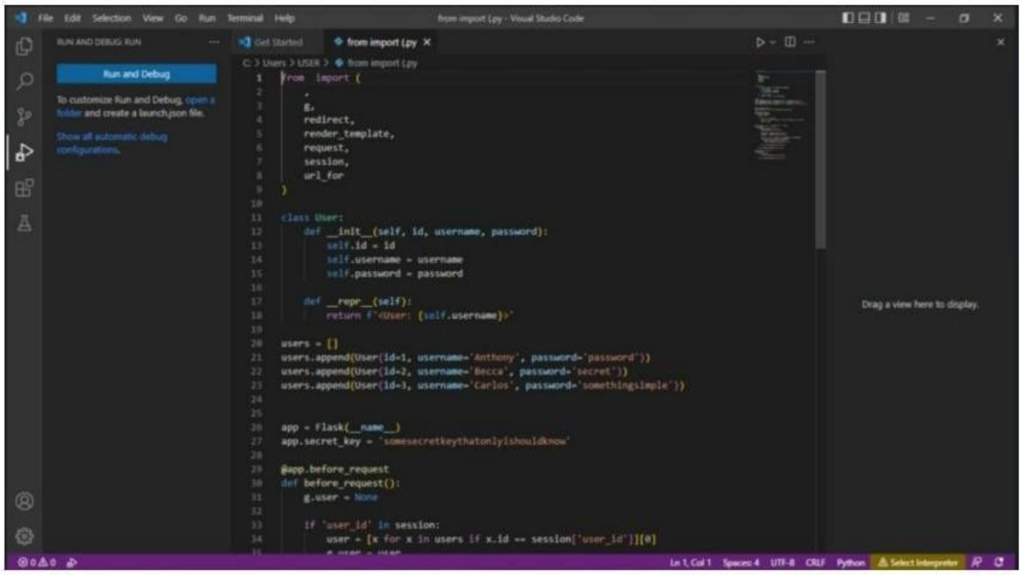
```html
<!DOCTYPE html>
<html>

<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <title>Login</title>
  <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bulma@0.8.0/css/bulma.min.css">
  <script defer src="https://use.fontawesome.com/releases/v5.3.1/js/all.js"></script>
</head>

<body>
  <section class="hero is-info is-fullheight">
    <div class="hero-body">
      <div class="container">
        <div class="columns is-centered">
          <div class="column is-half">
            <form method="POST">
              <div class="field">
                <label class="label">Username</label>
                <div class="control has-icons-left has-icons-right">
                  <input class="input" type="text" name="username" placeholder="Username">
                  <span class="icon is-small is-left">
                    <i class="fas fa-user"></i>
                  </span>
                </div>
              </div>
              <div class="field">
                <label class="label">Password</label>
                <p class="control has-icons-left">
                  <input class="input" type="password" name="password" placeholder="Password">
                  <span class="icon is-small is-left">
                    <i class="fas fa-lock"></i>
                  </span>
                </p>
              </div>
              <div class="field">
                <p class="control">
                  <button type="submit" class="button is-success">
                    Login
                  </button>
                </p>
              </div>
```

Source code for welcome page



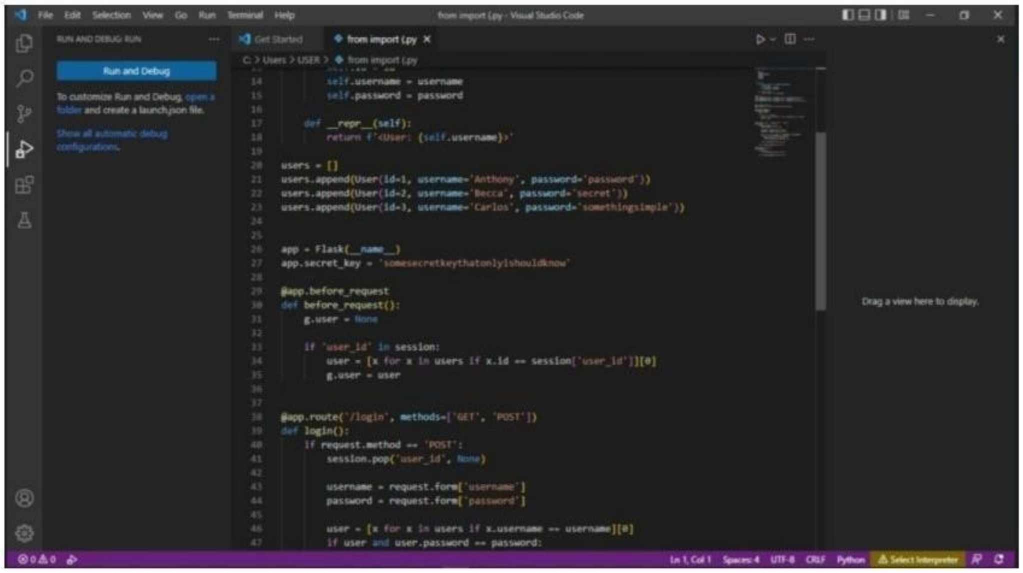
```html
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>Profile Page</title>
    <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bulma@0.8.0/css/bulma.min.css">
    <script defer src="https://use.fontawesome.com/releases/v5.3.1/js/all.js"></script>
  </head>
  <body>
    <section class="hero is-success is-fullheight">
      <div class="hero-body">
        <div class="container">
          <h1 class="title">
            {{g.user.username}}'s Profile
          </h1>
          <h2 class="subtitle">
            You are user number #{{g.user.id}}
          </h2>
        </div>
      </div>
    </section>
  </body>
</html>
```

Flask code



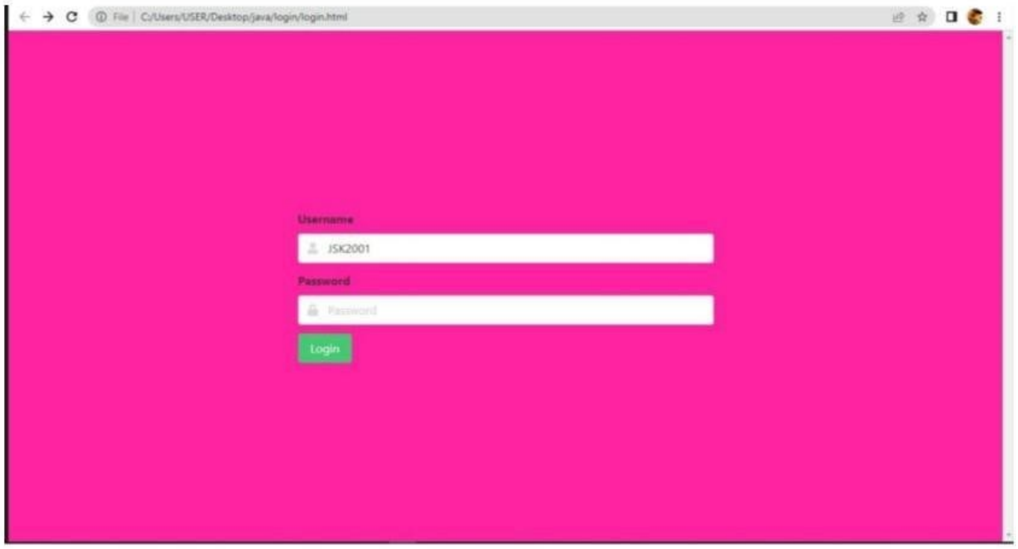
```python
from  import (
    ,
    g,
    redirect,
    render_template,
    request,
    session,
    url_for
)

class User:
    def __init__(self, id, username, password):
        self.id = id
        self.username = username
        self.password = password

    def __repr__(self):
        return f'<User: {self.username}>'

users = []
users.append(User(id=1, username='Anthony', password='password'))
users.append(User(id=2, username='Becca', password='secret'))
users.append(User(id=3, username='Carlos', password='somethingsimple'))


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

@app.before_request
def before_request():
    g.user = None

    if 'user_id' in session:
        user = [x for x in users if x.id == session['user_id']][0]
```

Flask code

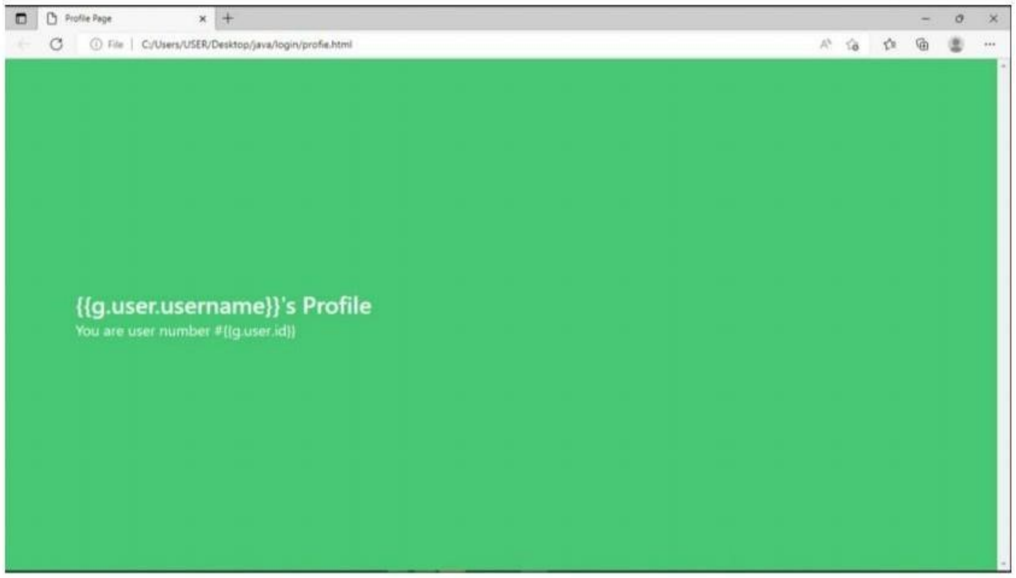


```python
        self.username = username
        self.password = password

    def __repr__(self):
        return f'<User: {self.username}>'

users = []
users.append(User(id=1, username='Anthony', password='password'))
users.append(User(id=2, username='Becca', password='secret'))
users.append(User(id=3, username='Carlos', password='somethingsimple'))


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

@app.before_request
def before_request():
    g.user = None

    if 'user_id' in session:
        user = [x for x in users if x.id == session['user_id']][0]
        g.user = user


@app.route('/login', methods=['GET', 'POST'])
def login():
    if request.method == 'POST':
        session.pop('user_id', None)

        username = request.form['username']
        password = request.form['password']

        user = [x for x in users if x.username == username][0]
        if user and user.password == password:
```

Login Page Output



Welcome Page Output



{{g.user.username}}'s Profile
You are user number #{{g.user.id}}