IBM Assignment -2

Project Title : Personal Expense Tracker Application

Team ID : PNT2022TMID32657

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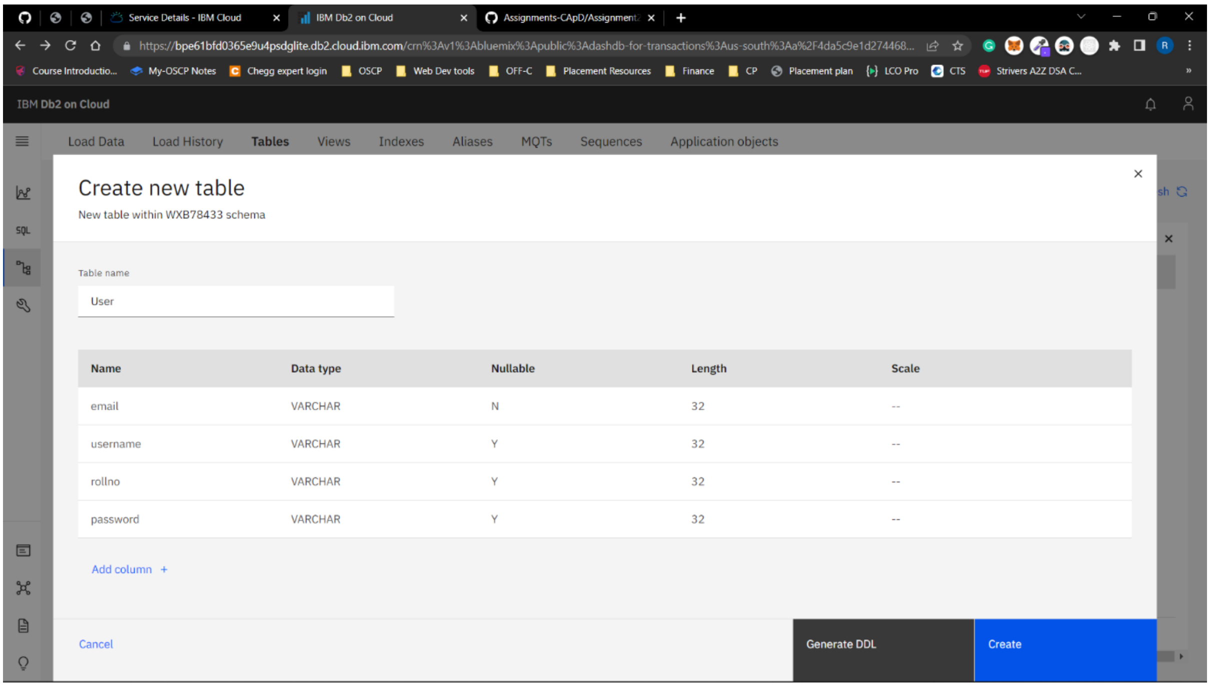
Registration No : 813819104077

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

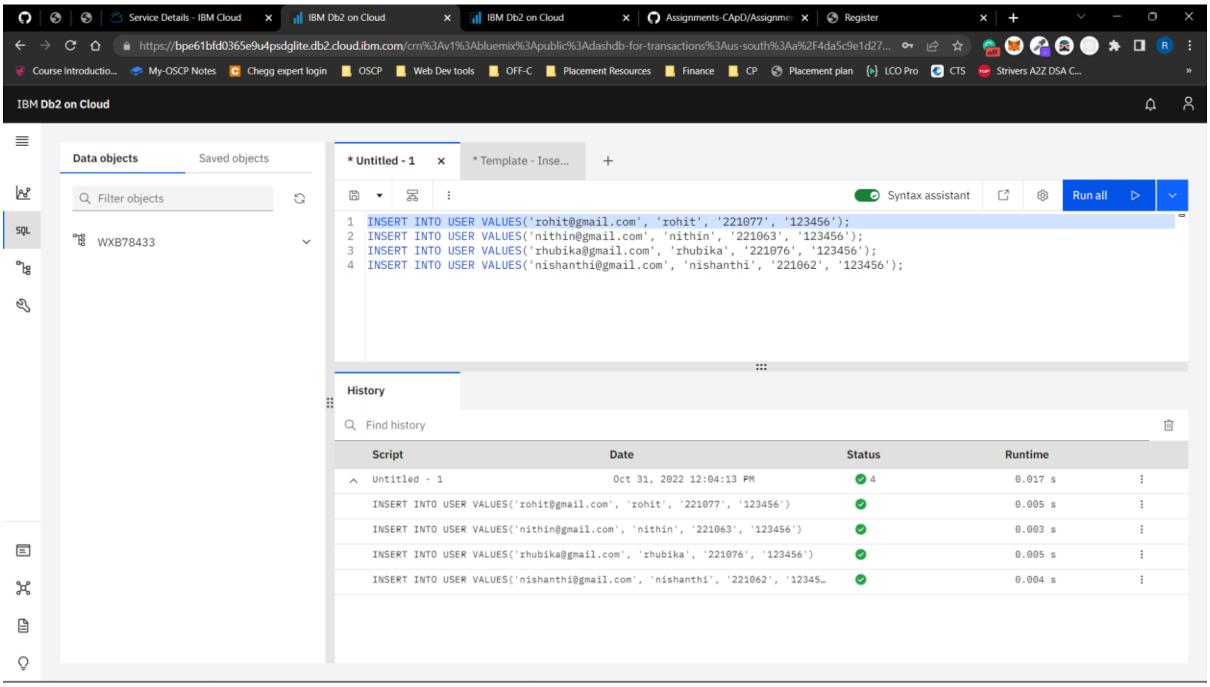


Create new table

New table within WXB78433 schema

Table name: User

Name	Data type	Nullable	Length	Scale
email	VARCHAR	N	32	--
username	VARCHAR	Y	32	--
rollno	VARCHAR	Y	32	--
password	VARCHAR	Y	32	--

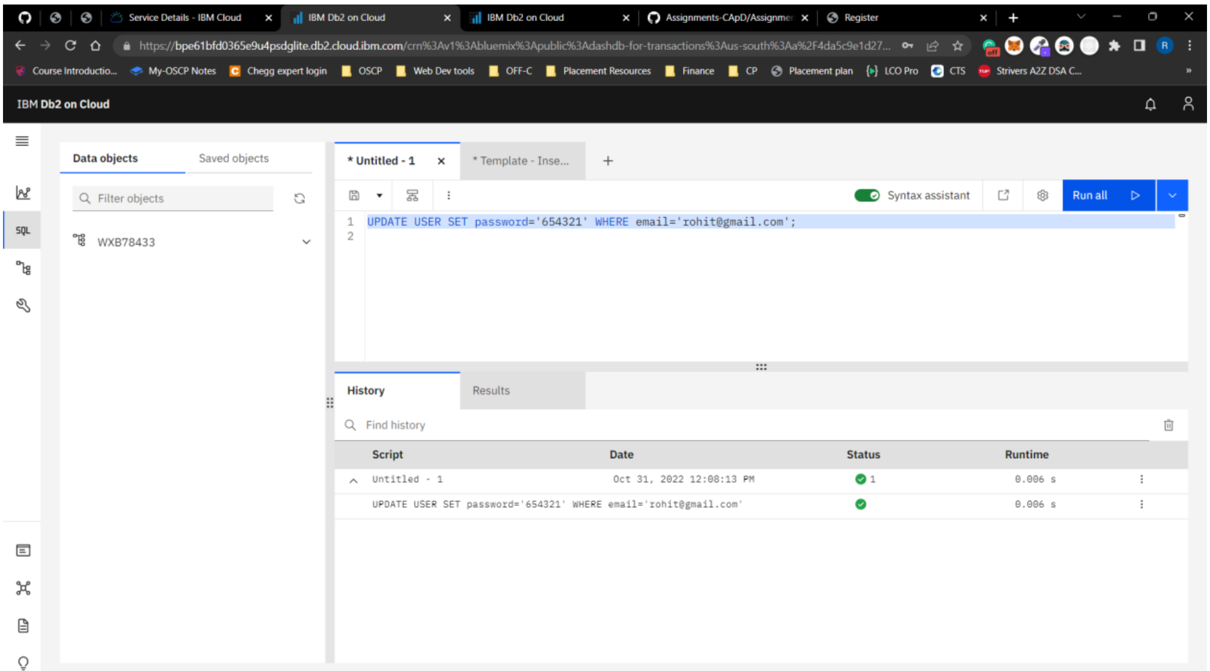


```
INSERT INTO USER VALUES('rohit@gmail.com', 'rohit', '221077', '123456');
INSERT INTO USER VALUES('nithin@gmail.com', 'nithin', '221063', '123456');
INSERT INTO USER VALUES('rhubika@gmail.com', 'rhubika', '221076', '123456');
INSERT INTO USER VALUES('nishanthi@gmail.com', 'nishanthi', '221062', '123456');
```

History

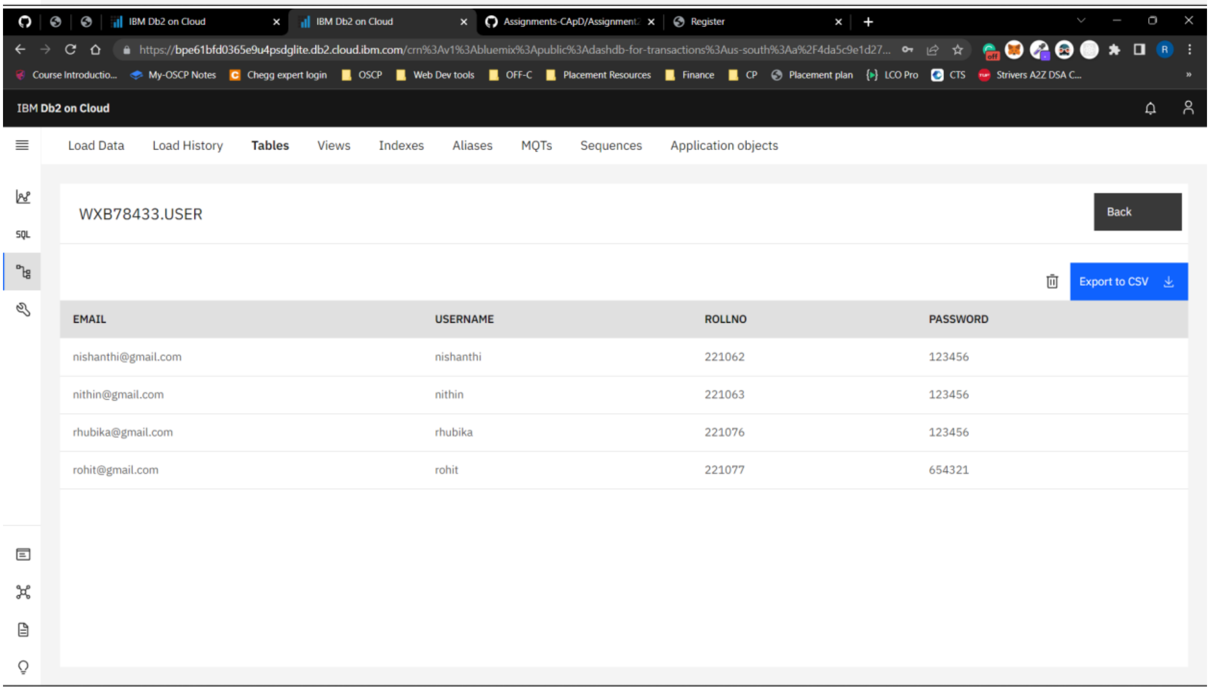
Script	Date	Status	Runtime
Untitled - 1	Oct 31, 2022 12:04:13 PM	✓ 4	0.017 s
INSERT INTO USER VALUES('rohit@gmail.com', 'rohit', '221077', '123456')		✓	0.005 s
INSERT INTO USER VALUES('nithin@gmail.com', 'nithin', '221063', '123456')		✓	0.003 s
INSERT INTO USER VALUES('rhubika@gmail.com', 'rhubika', '221076', '123456')		✓	0.005 s
INSERT INTO USER VALUES('nishanthi@gmail.com', 'nishanthi', '221062', '12345…		✓	0.004 s

2) A) Perform UPDATE Query with user table



```
UPDATE USER SET password='654321' WHERE email='rohit@gmail.com';
```

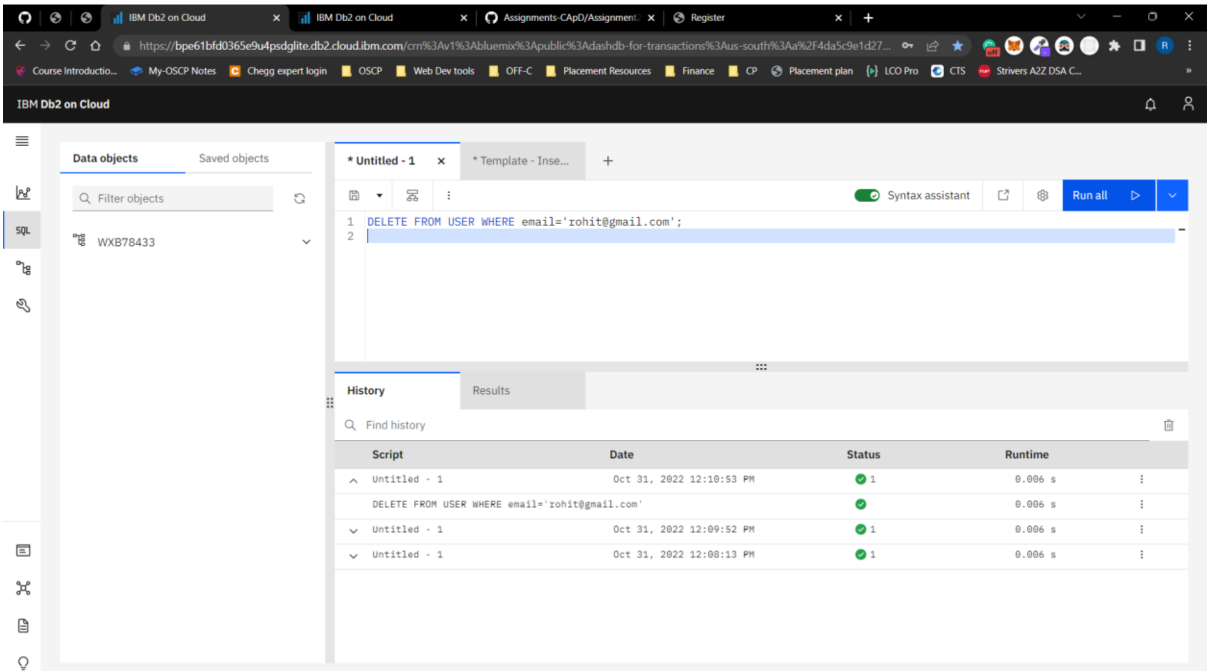
Script	Date	Status	Runtime
Untitled - 1	Oct 31, 2022 12:08:13 PM	✓ 1	0.006 s
UPDATE USER SET password='654321' WHERE email='rohit@gmail.com'		✓	0.006 s



WXB78433.USER

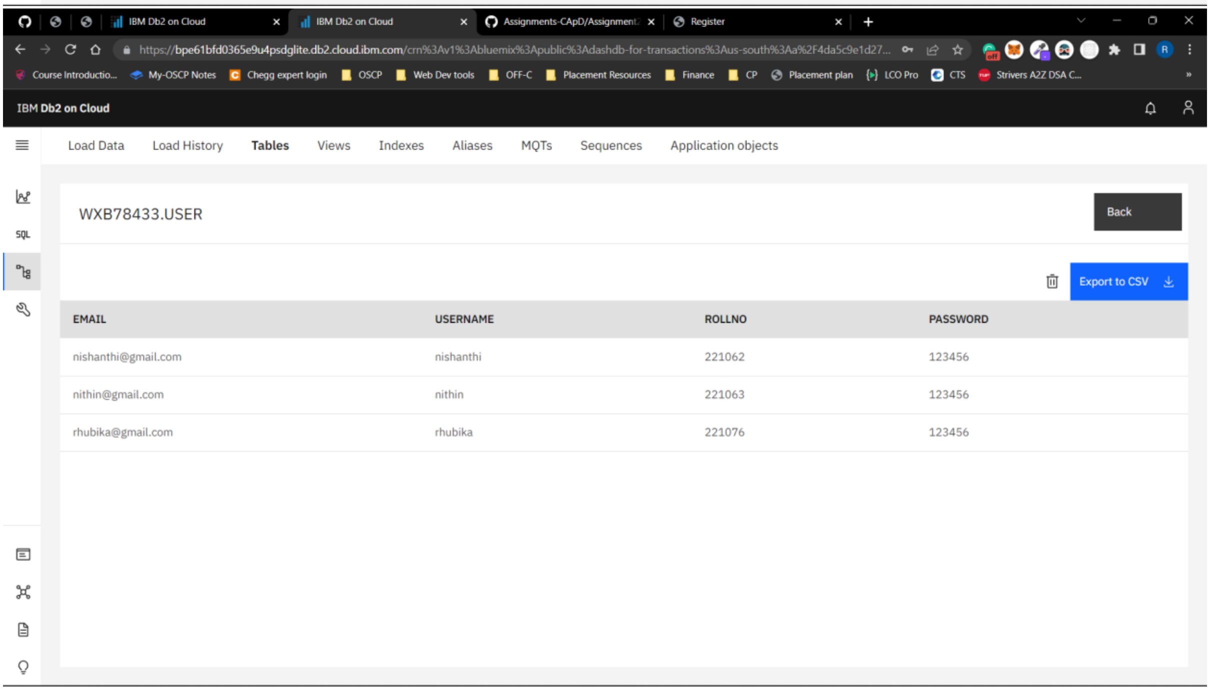
EMAIL	USERNAME	ROLLNO	PASSWORD
nishanthi@gmail.com	nishanthi	221062	123456
nithin@gmail.com	nithin	221063	123456
rhubika@gmail.com	rhubika	221076	123456
rohit@gmail.com	rohit	221077	654321

B) Perform DELETE Query with user table



```
DELETE FROM USER WHERE email='rohit@gmail.com';
```

Script	Date	Status	Runtime
Untitled - 1	Oct 31, 2022 12:10:53 PM	✓ 1	0.006 s
DELETE FROM USER WHERE email='rohit@gmail.com'		✓	0.006 s
Untitled - 1	Oct 31, 2022 12:09:52 PM	✓ 1	0.006 s
Untitled - 1	Oct 31, 2022 12:08:13 PM	✓ 1	0.006 s



WXB78433.USER

EMAIL	USERNAME	ROLLNO	PASSWORD
nishanthi@gmail.com	nishanthi	221062	123456
nithin@gmail.com	nithin	221063	123456
rhubika@gmail.com	rhubika	221076	123456

3) Connect python code to db2.

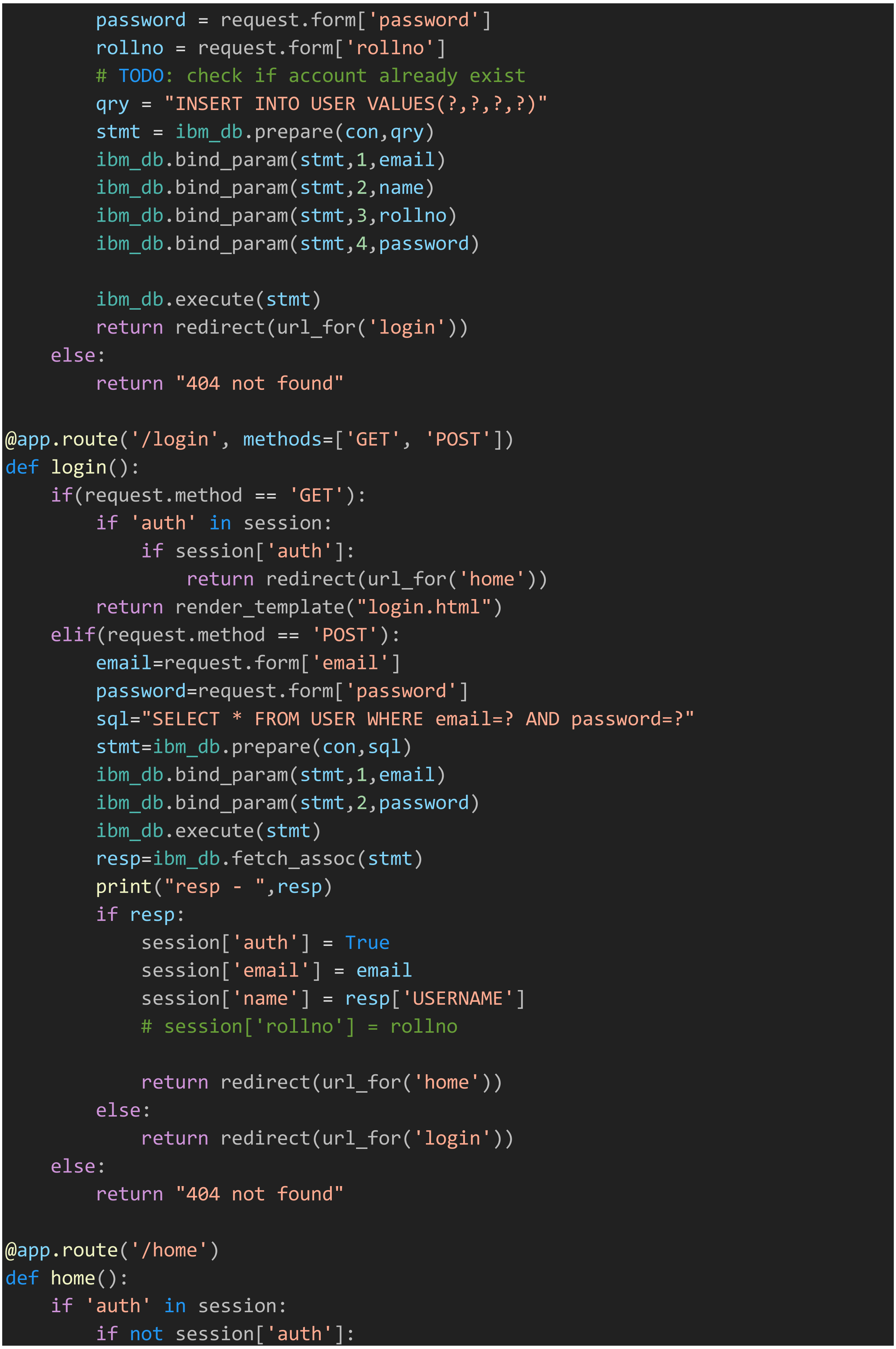
Connect.py

```
import ibm_db

def get_db_connection():
    try:
        conn = ibm_db.connect("DATABASE=BLUDB;\
            HOSTNAME=<hostname>;\
            PORT=30376;\
            Security=SSL;\
            SSLServerCertificate=DigiCertGlobalRootCA.crt;\
            UID=<username>;\
            PWD=<password>;","","")
        print("Connected to DB")
        return conn
    except:
        print("error while connecting ",ibm_db.conn_errormsg())
        return 0
```

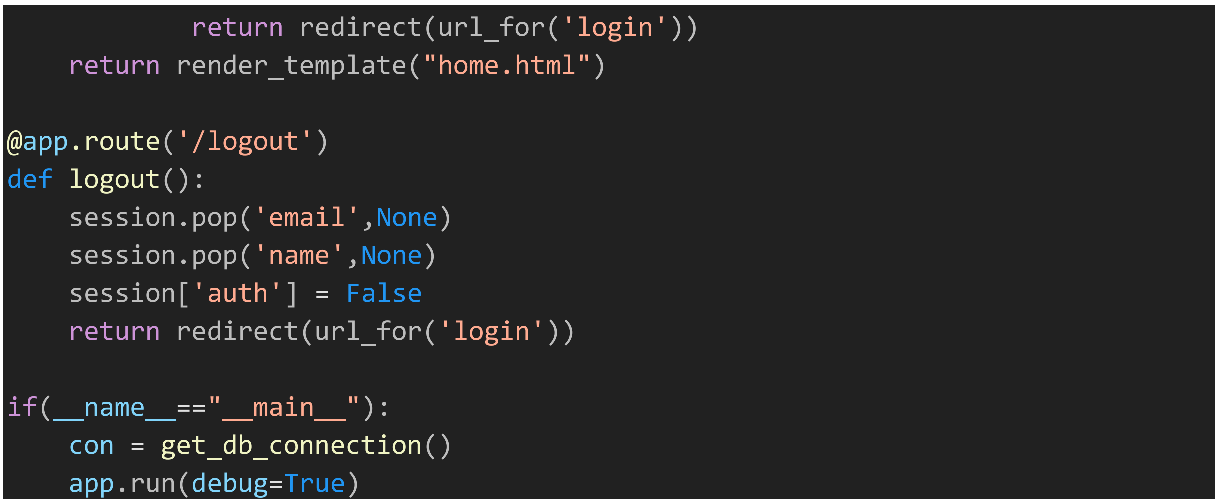
4) Create a flask app with registration page, login page and welcome page. By default load the registration page once the user enters all the fields store the data in database and navigate to login page. Authenticate user with username and password. If the user is valid show the welcome page

App.py

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

app = Flask(__name__)
app.secret_key = 'abcde'
con = 0

@app.route('/')
@app.route("/register", methods=['GET','POST'])
def register():
    if(request.method == 'GET'):
        if 'auth' in session:
            if session['auth']:
                return redirect(url_for('home'))
        return render_template("register_2.html")
    elif(request.method == 'POST'):
        name = request.form['username']
        email = request.form['email']
```

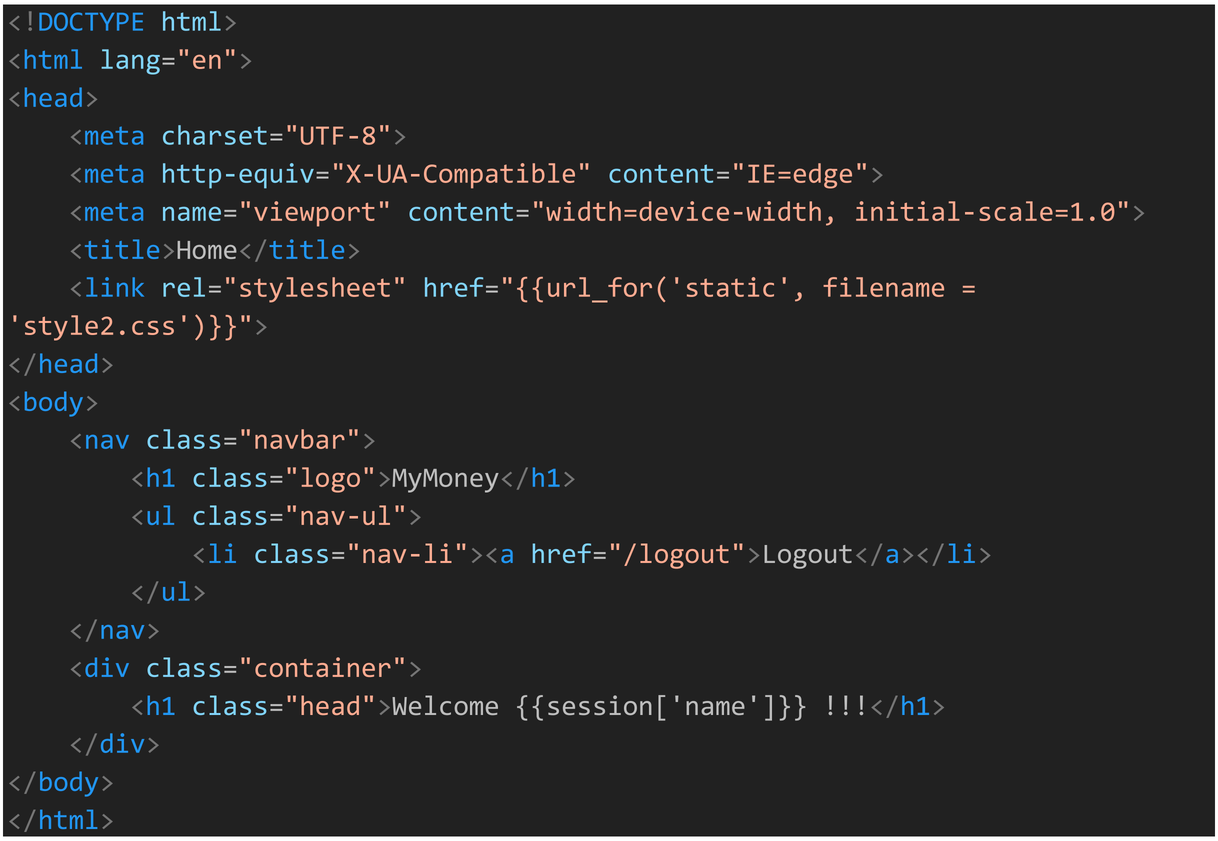


```
        password = request.form['password']
        rollno = request.form['rollno']
        # TODO: check if account already exist
        qry = "INSERT INTO USER VALUES(?,?,?,?)"
        stmt = ibm_db.prepare(con,qry)
        ibm_db.bind_param(stmt,1,email)
        ibm_db.bind_param(stmt,2,name)
        ibm_db.bind_param(stmt,3,rollno)
        ibm_db.bind_param(stmt,4,password)

        ibm_db.execute(stmt)
        return redirect(url_for('login'))
    else:
        return "404 not found"

@app.route('/login', methods=['GET', 'POST'])
def login():
    if(request.method == 'GET'):
        if 'auth' in session:
            if session['auth']:
                return redirect(url_for('home'))
        return render_template("login.html")
    elif(request.method == 'POST'):
        email=request.form['email']
        password=request.form['password']
        sql="SELECT * FROM USER WHERE email=? AND password=?"
        stmt=ibm_db.prepare(con,sql)
        ibm_db.bind_param(stmt,1,email)
        ibm_db.bind_param(stmt,2,password)
        ibm_db.execute(stmt)
        resp=ibm_db.fetch_assoc(stmt)
        print("resp - ",resp)
        if resp:
            session['auth'] = True
            session['email'] = email
            session['name'] = resp['USERNAME']
            # session['rollno'] = rollno

            return redirect(url_for('home'))
        else:
            return redirect(url_for('login'))
    else:
        return "404 not found"

@app.route('/home')
def home():
    if 'auth' in session:
        if not session['auth']:
```



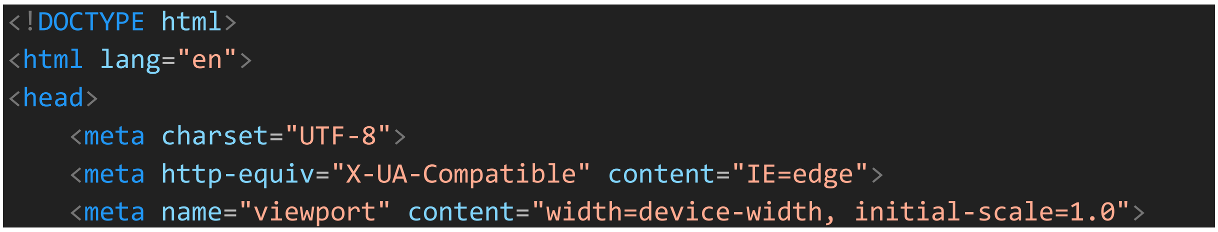
```
            return redirect(url_for('login'))
    return render_template("home.html")

@app.route('/logout')
def logout():
    session.pop('email',None)
    session.pop('name',None)
    session['auth'] = False
    return redirect(url_for('login'))

if(__name__=="__main__"):
    con = get_db_connection()
    app.run(debug=True)
```

home.html



```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Home</title>
    <link rel="stylesheet" href="{{url_for('static', filename =
'style2.css')}}">
</head>
<body>
    <nav class="navbar">
        <h1 class="logo">MyMoney</h1>
        <ul class="nav-ul">
            <li class="nav-li"><a href="/logout">Logout</a></li>
        </ul>
    </nav>
    <div class="container">
        <h1 class="head">Welcome {{session['name']}} !!!</h1>
    </div>
</body>
</html>
```

Register.html



```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

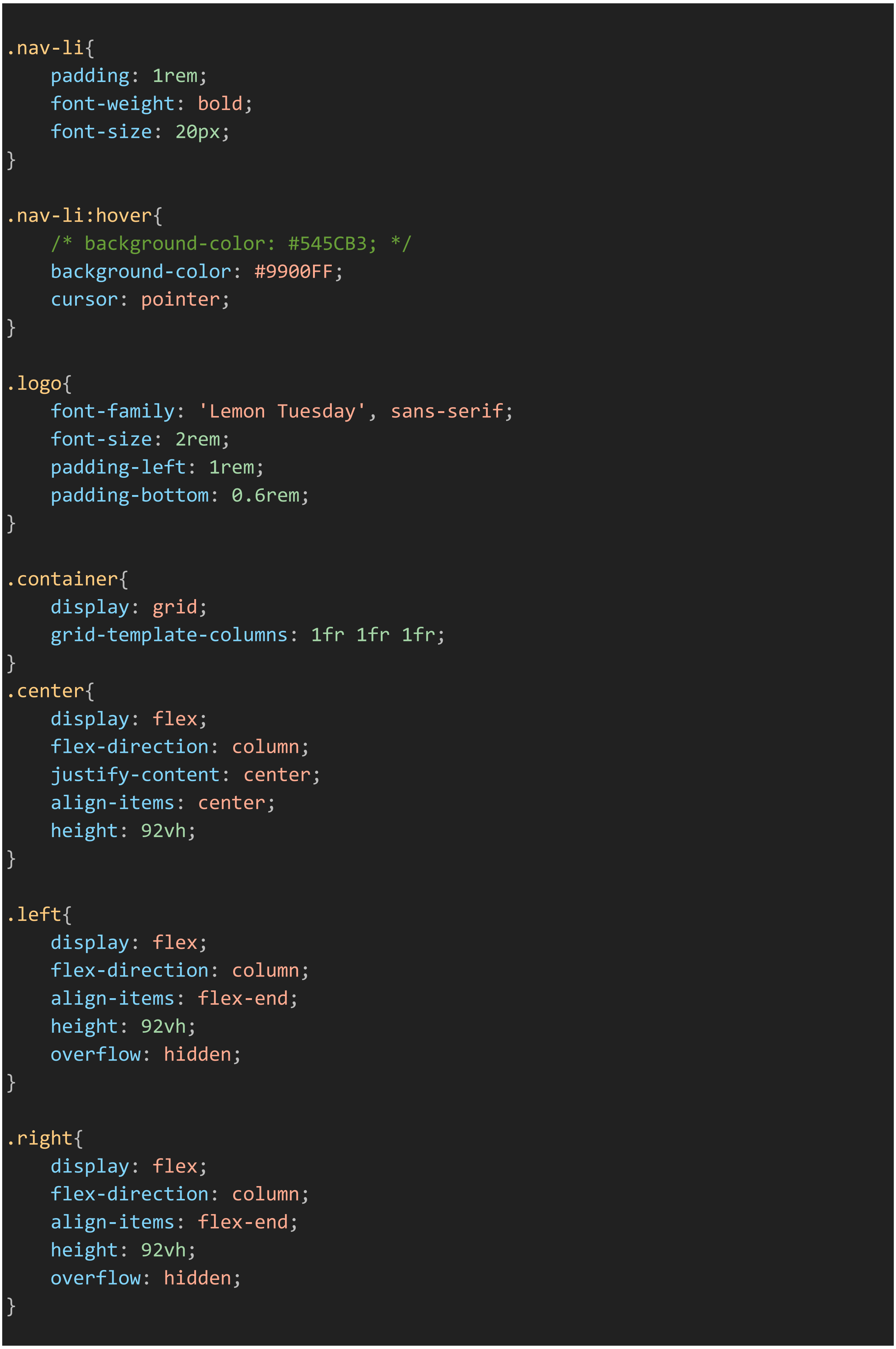
```html
    <link rel="stylesheet" href="{{url_for('static', filename =
'style2.css')}}">
    <title>Register</title>
</head>
<body>
    <nav class="navbar">
        <h1 class="logo">MyMoney</h1>
        <ul class="nav-ul">
            <li class="nav-li"><a href="/login">Login</a></li>
        </ul>
    </nav>
    <div class="container">
            <h1 class="head">Register for a New Account</h1>
            <form action="/register" method="post" class="register">
                <label for="name">UserName</label>
                <input type="text" name="username" class="inp">

                <label for="name">Rollno</label>
                <input type="text" name="rollno" class="inp">

                <label for="email">Email</label>
                <input type="email" name="email" class="inp">

                <label for="password">Password</label>
                <input type="password" name="password" class="inp">

                <input type="submit" value="Register" class="inp-btn">

            </form>
    </div>
</body>
</html>
```

Login.html

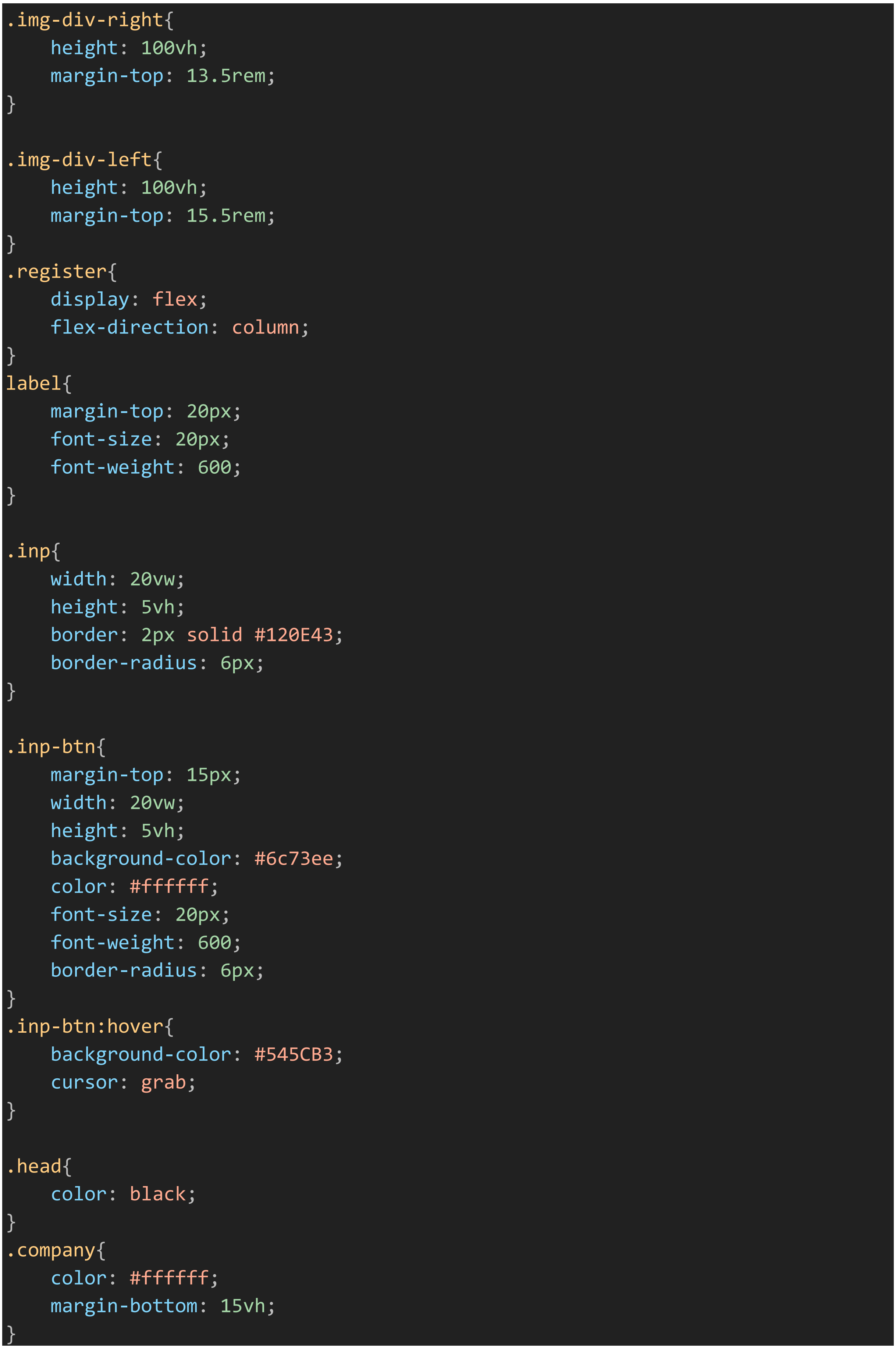
```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="{{url_for('static', filename =
'style2.css')}}">
    <title>Register</title>
</head>
<body>
    <nav class="navbar">
        <h1 class="logo">MyMoney</h1>
        <ul class="nav-ul">
            <li class="nav-li"><a href="/register">Register</a></li>
        </ul>
    </nav>
    <div class="container">
            <h1 class="head">Login to your Account</h1>
            <form action="/login" method="post" class="register">

                <label for="email">Email</label>
                <input type="email" name="email" class="inp">

                <label for="password">Password</label>
                <input type="password" name="password" class="inp">

                <input type="submit" value="Login" class="inp-btn">

            </form>
    </div>
</body>
</html>
```

Style2.css

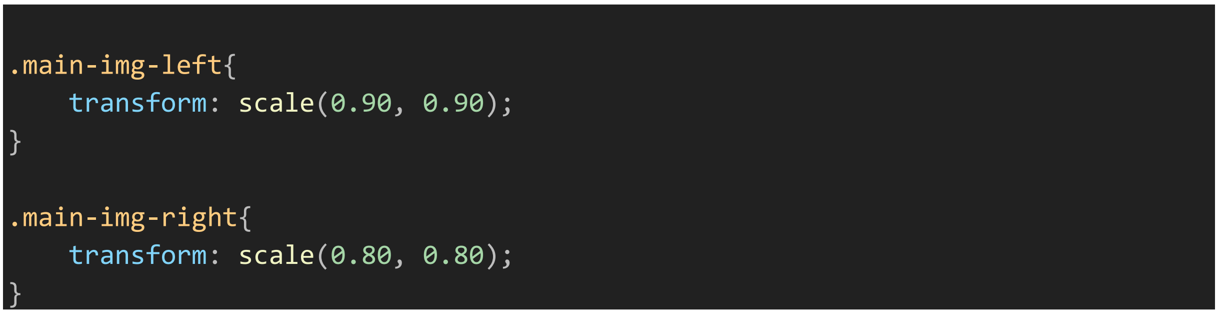
```
@import
url('https://fonts.googleapis.com/css2?family=Montserrat:wght@400;500;600&display=swap');
@import url('http://fonts.cdnfonts.com/css/lemon-tuesday');
*{
    margin: 0%;
    padding: 0%;
    box-sizing: border-box;
    font-family: 'Montserrat', sans-serif;
}

.navbar{
    display: flex;
    flex-direction: row;
    justify-content: space-between;
    align-items: center;
    /* background-color: #6c73ee; */
    background-color: #7C4CFB;
    color: rgb(234, 237, 240);
}
.nav-ul{
    display: flex;
    flex-direction: row;
    list-style: none;
}
```



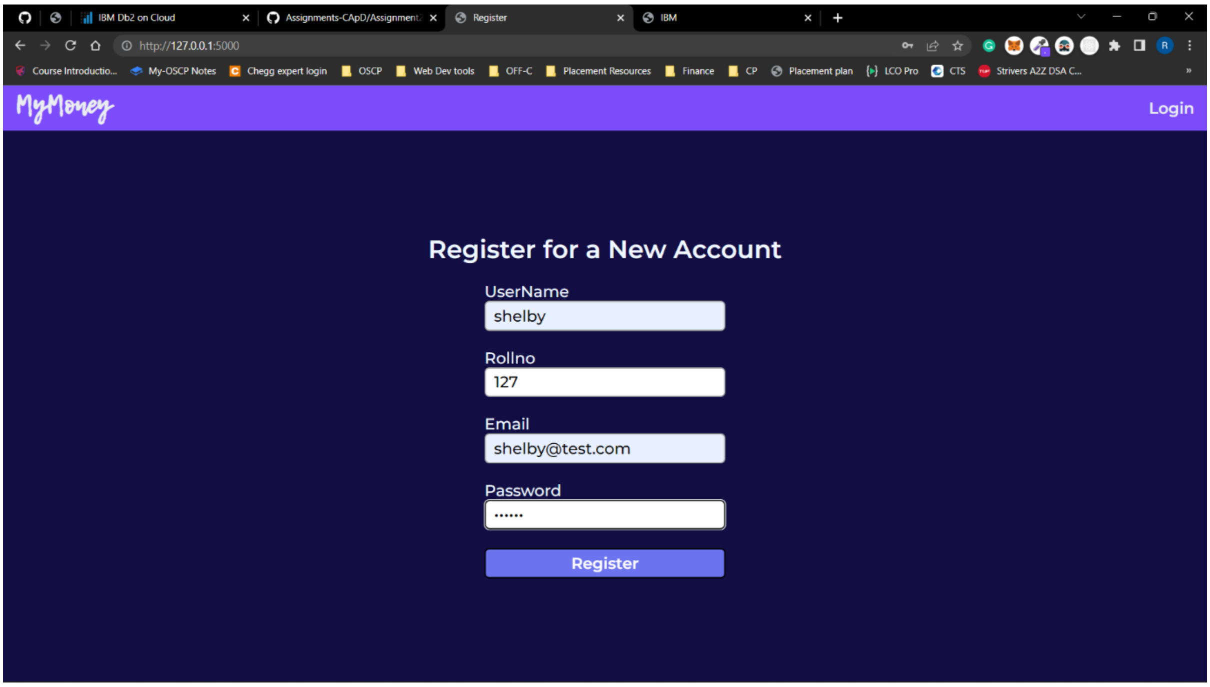
```css
.nav-li{
    padding: 1rem;
    font-weight: bold;
    font-size: 20px;
}

.nav-li:hover{
    /* background-color: #545CB3; */
    background-color: #9900FF;
    cursor: pointer;
}

.logo{
    font-family: 'Lemon Tuesday', sans-serif;
    font-size: 2rem;
    padding-left: 1rem;
    padding-bottom: 0.6rem;
}

.container{
    display: grid;
    grid-template-columns: 1fr 1fr 1fr;
}
.center{
    display: flex;
    flex-direction: column;
    justify-content: center;
    align-items: center;
    height: 92vh;
}

.left{
    display: flex;
    flex-direction: column;
    align-items: flex-end;
    height: 92vh;
    overflow: hidden;
}

.right{
    display: flex;
    flex-direction: column;
    align-items: flex-end;
    height: 92vh;
    overflow: hidden;
}
```



```
.img-div-right{
    height: 100vh;
    margin-top: 13.5rem;
}

.img-div-left{
    height: 100vh;
    margin-top: 15.5rem;
}
.register{
    display: flex;
    flex-direction: column;
}
label{
    margin-top: 20px;
    font-size: 20px;
    font-weight: 600;
}

.inp{
    width: 20vw;
    height: 5vh;
    border: 2px solid #120E43;
    border-radius: 6px;
}

.inp-btn{
    margin-top: 15px;
    width: 20vw;
    height: 5vh;
    background-color: #6c73ee;
    color: #ffffff;
    font-size: 20px;
    font-weight: 600;
    border-radius: 6px;
}
.inp-btn:hover{
    background-color: #545CB3;
    cursor: grab;
}

.head{
    color: black;
}
.company{
    color: #ffffff;
    margin-bottom: 15vh;
}
```



```
.main-img-left{
    transform: scale(0.90, 0.90);
}

.main-img-right{
    transform: scale(0.80, 0.80);
}
```



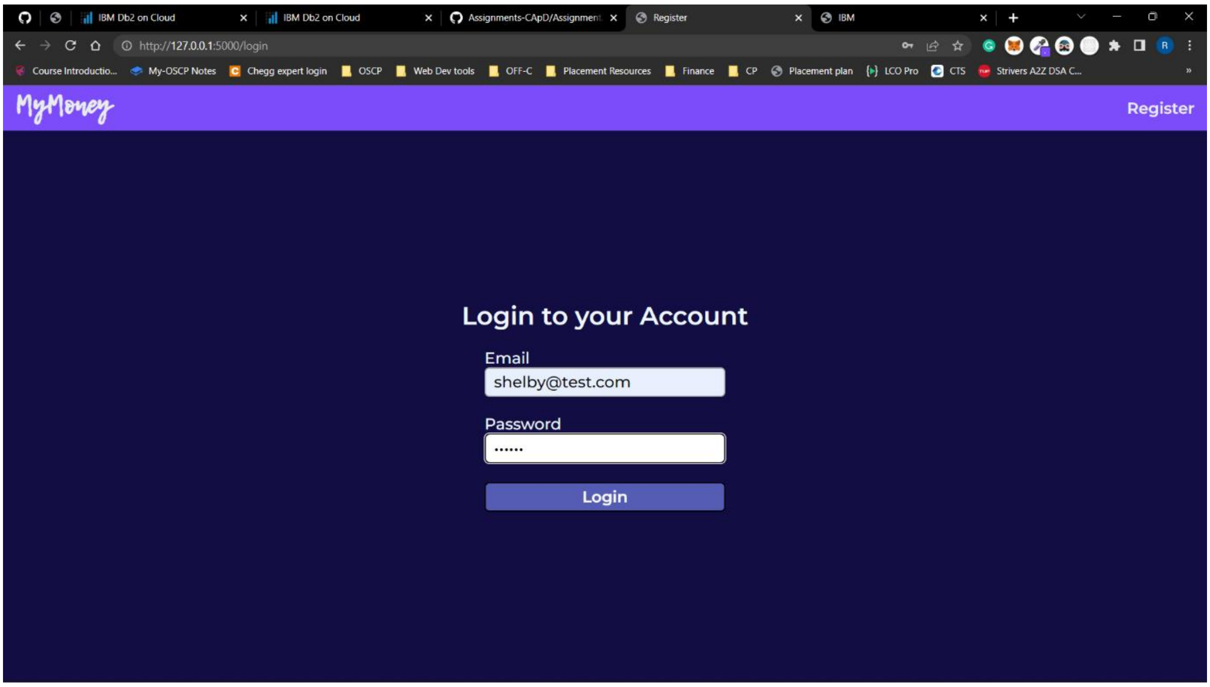
Register for a New Account

UserName: shelby

Rollno: 127

Email: shelby@test.com

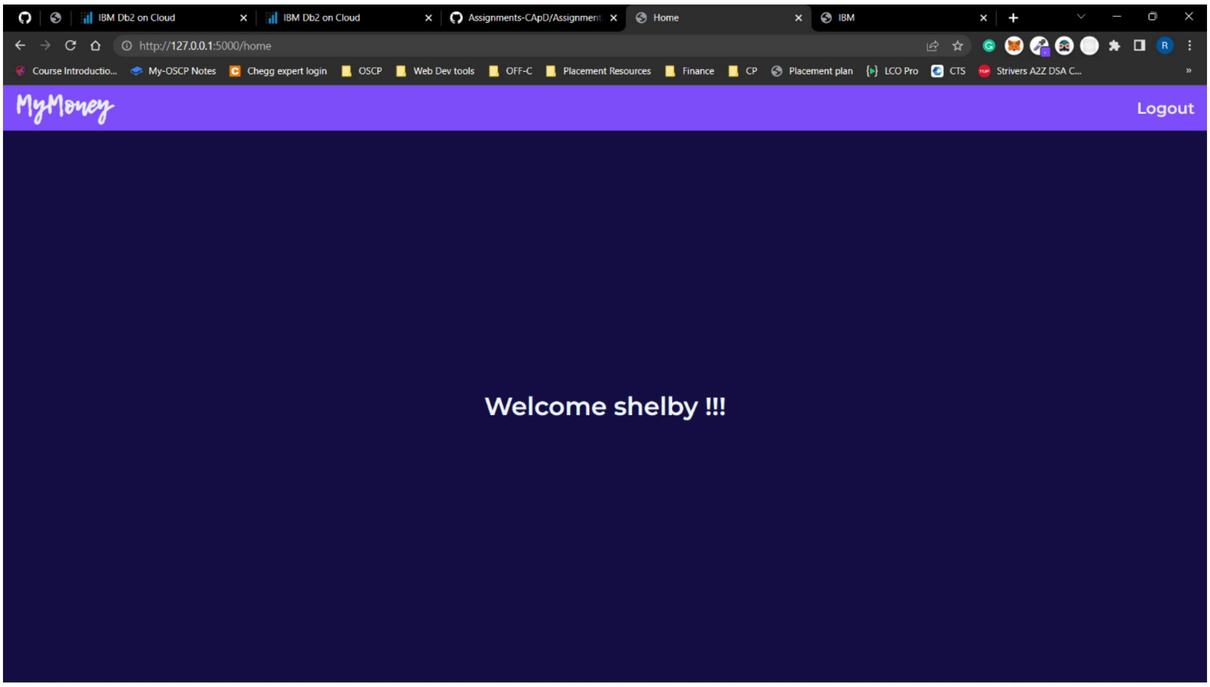
Password: ••••••



Login to your Account

Email: shelby@test.com

Password: ••••••



Welcome shelby !!!