

## Assignment -2

### Question-1:

1. Create User table with user with email, username, roll number, password.
2. Perform UPDATE, DELETE Queries with user table
3. Connect python code to db2.
4. Create a flask app with registration page, login page and welcome page.

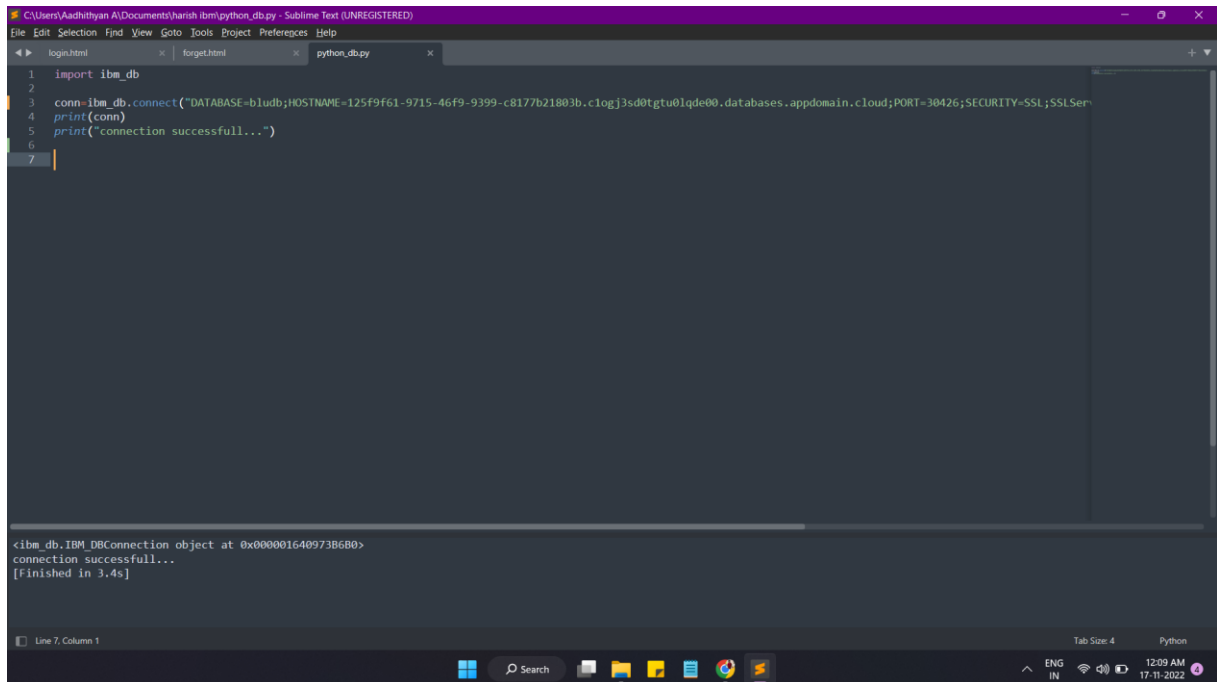
By default, load the registration page once the user enters all the fields store the data in database and navigate to login page authenticate user username and password. If the user is valid show the welcome page.

1.

The screenshot displays the IBM Db2 on Cloud web interface. The top navigation bar includes 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The 'Tables' tab is selected. On the left, a sidebar shows 'Schemas' and 'Tables' sections. The main area shows a table named 'CUSTOMER\_DATA' in the 'NNQ84077' schema. The table definition is shown on the right, with columns: USERNAME (VARCHAR, 32, NULLABLE), EMAIL (VARCHAR, 32, NULLABLE), PASSWORD (VARCHAR, 32, NULLABLE), and PHONE (DECIMAL, 10, NULLABLE). The table has approximately 0 rows (0 KB) and was updated on 2022-11-16 14:52:28. A 'View data' button is visible at the bottom right of the table definition panel.

Name	Data type	Nullable	Length	Scale
USERNAME	VARCHAR	N	32	0
EMAIL	VARCHAR	N	32	0
PASSWORD	VARCHAR	N	32	0
PHONE	DECIMAL	N	10	0

3.



```
1 import ibm_db
2
3 conn=ibm_db.connect("DATABASE=bludb;HOSTNAME=125f9f61-9715-46f9-9399-c8177b21883b.clogj3sd0tgtu0lqde00.databases.apptomain.cloud;PORT=30426;SECURITY=SSL;SSLServerCertificate=125f9f61-9715-46f9-9399-c8177b21883b.clogj3sd0tgtu0lqde00.databases.apptomain.cloud")
4 print(conn)
5 print("connection successfull...")
6
7
```

<ibm\_db.IBM\_DBConnection object at 0x000001640973B6B0>  
connection successfull...  
[Finished in 3.4s]

4.

**Base.html:**

```
<html>

<head>

    <link rel="stylesheet" href="static/css/main.css">

    {% block head %}

    {% endblock %}

</head>

<body>

    {% block body %}

    {% endblock %}

</body>

</html>
```

**Main.css:** .login { width: 60%; border-radius: 1rem; background: gray; padding: 10px; margin: auto; text-align: center; font-family: 'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif; }

```

.back{  background-color:
black;
}

.sub{  background-color:
black;  color: white;
border-radius: 1rem;
}

.box{
    border-radius: 1rem;
background-color: black;  color:
white;
}

```

#### Dashboard.html:

```

{% extends 'base.html' %}

{% block head %}

<title>Login</title>

{% endblock %}

{% block body %}

<br><br><br><br><br>  <br><br><br><br><br>

<div class="login">

    <h1>

        Welcome to dashboard.. {{ msg }}

    </h1>

    <hr>

</div>

{% endblock %}

```

#### Login.html:

```

{% extends 'base.html' %}

{% block head %}

<title>Login</title>

```

```
{% endblock %}

{% block body %}

<br><br><br><br><br><br>

<div class="login">

    <h1>

        Login

    </h1>

    <hr>

    <form action="/login" method="POST">

        <br>

        username: <input type="text" class="box" name="username" id="username"><br><br>

        Password: <input type="password" class="box" name="passwd" id="passwd"><br><br>

        <input type="submit" class="sub" value="Sign in">

    </form>

    Don't have account? <a href="/signup">Sign up</a>

</div>

{% endblock %}
```

### Signup.html:

```
{% extends 'base.html' %}

{% block head %}

<title>Login</title>

{% endblock %}

{% block body %}

<br><br><br><br><br> <br><br>

<div class="login">

    <h1>

        Sign Up

    </h1>

    <hr>

    <form action="/signup" method="POST">

        <br>
```

```

        username: <input type="text" class="box" name="username" id="username"><br><br>
email: <input type="text" class="box" name="email" id="eamil"><br><br>

        Password: <input type="password" class="box" name="passwd" id="passwd"><br><br>

        <input type="submit" class="sub" value="Sign up"><br>

    </form>

    Already have an account? <a href="/login">Login</a>

</div>

{% endblock %}

```

### App.py:

```

from flask import Flask, render_template, request, session, redirect, url_for
import ibm_db import
re import ibm_db_dbi
app = Flask(__name__)
app.secret_key = 'a'

conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=b70af05b-76e4-4bca-
a1f523dbb4c6a74e.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32716;SECURIT
Y=S
SL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=xyn12614;PWD=oXjOuam0AOYeLVKq
", "", "")

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

    if request.method == 'POST':
        username = request.form['username']    password =
request.form['passwd']    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('dashboard.html', msg=msg)
else:

    msg = 'Incorrect user credentials'    return
render_template('dashboard.html', msg=msg)
else:

    return render_template('login.html')

@app.route('/signup', methods=["POST", "GET"])
def signup():    if request.method == "POST":
    username = request.form['username']    email =
    request.form['email']    password =
    request.form['passwd']    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 = 'Acccount already exists'    elif not
    re.match(r'^[@]+@[^@]+\.[^@]+', email):

```

```

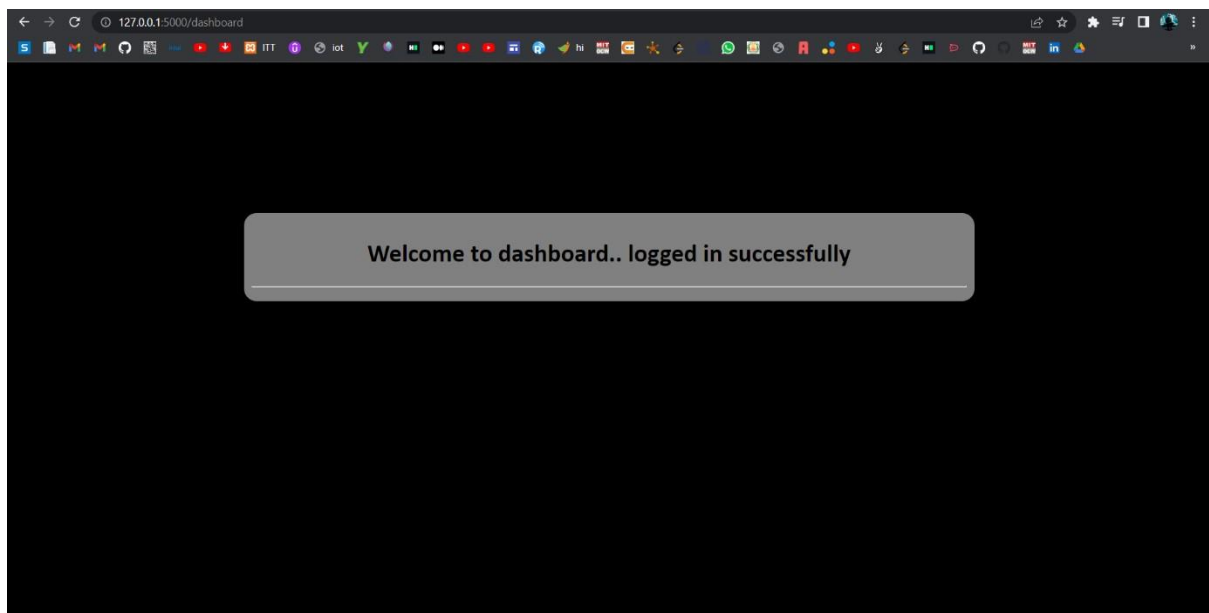
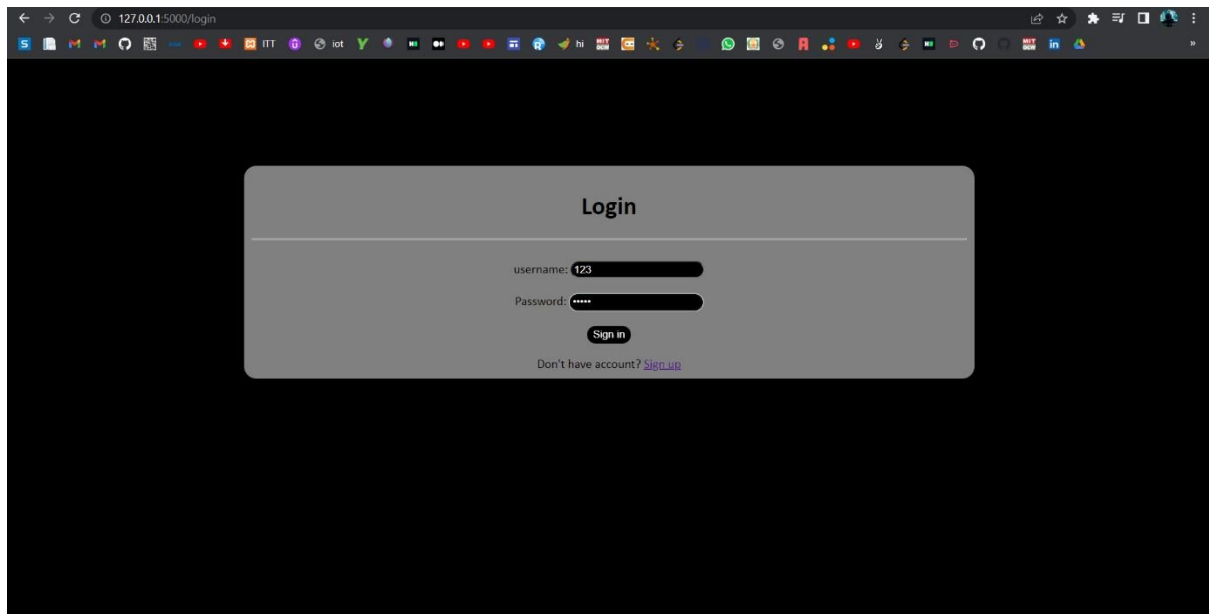
        msg = 'invalid email'    elif not
re.match(r'[A-Za-z0-9]+', username):
        msg = 'name must contain charectors and numbers'
    else:
        insert_sql = "insert into users values(?,?,?)"
        prep_stmt = ibm_db.prepare(conn, insert_sql)
        ibm_db.bind_param(prepare_stmt, 1, username)
        ibm_db.bind_param(prepare_stmt, 2, email)
        ibm_db.bind_param(prepare_stmt, 3, password)
        ibm_db.execute(prepare_stmt)
        print("successs")        msg
    = "succesfully signed up"
        return render_template('dashboard.html', msg=msg)
    else:
        return render_template('signup.html')

if __name__ == '__main__':
    app.run(debug=False) Output:

```

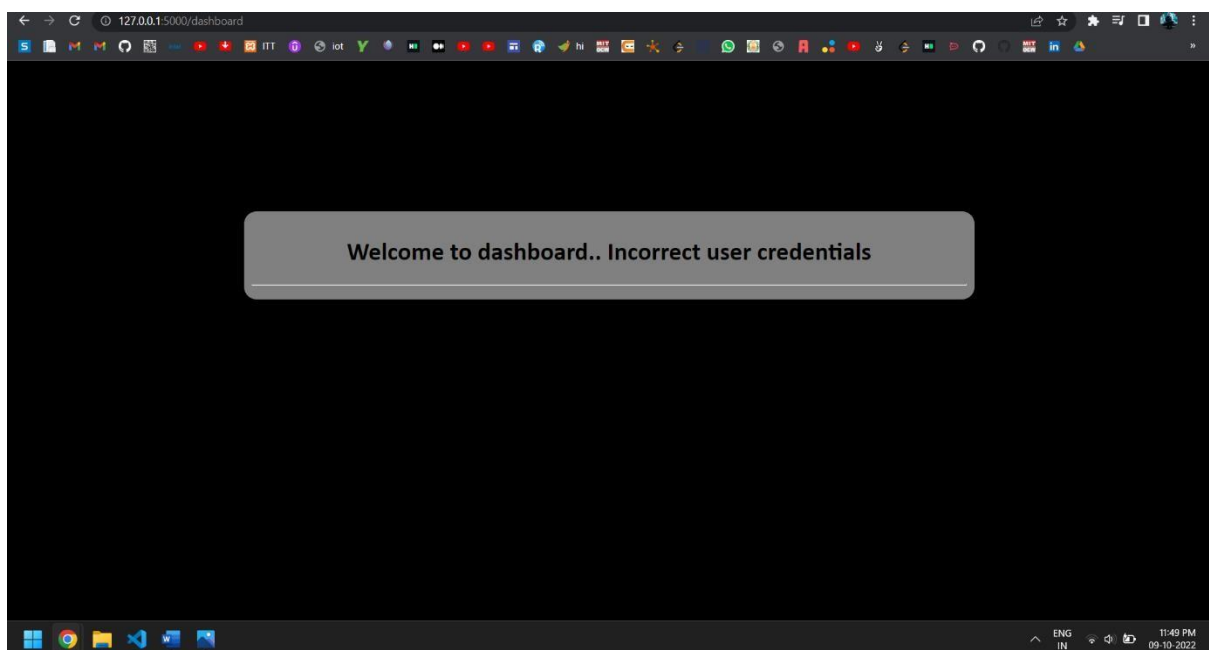
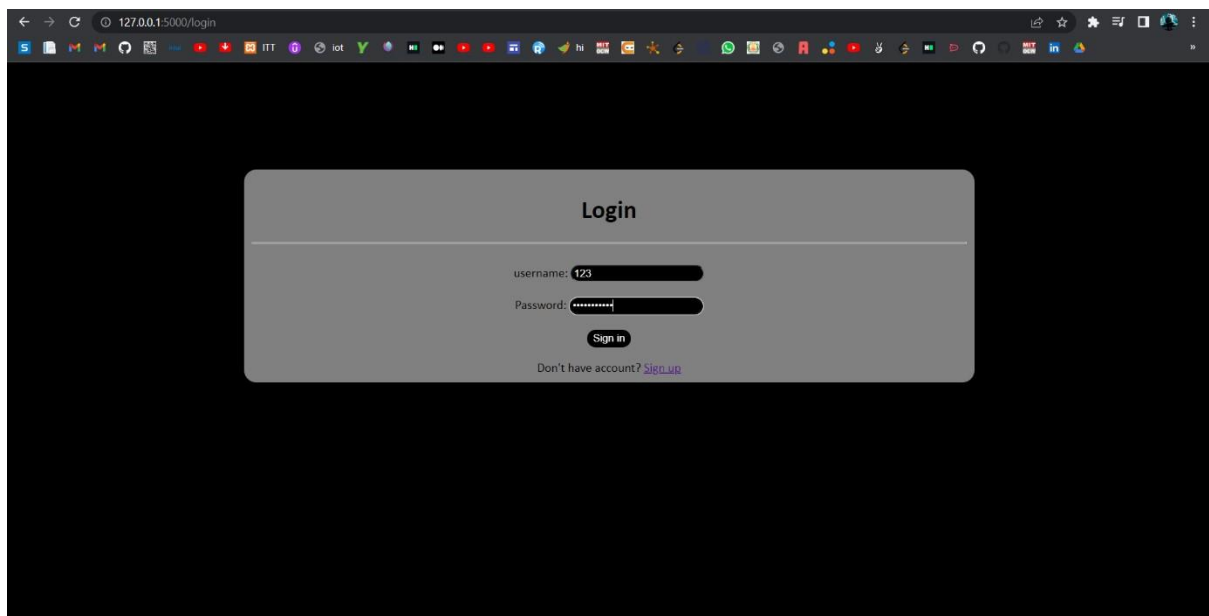
**Login:**

**With correct credentials:**



With wrong credentials:





Sign up:

127.0.0.1:5000/signup

### Sign Up

username: 123

email: ravi@gmail.com

Password: \*\*\*\*

[Sign up](#)

Already have an account? [Login](#)