

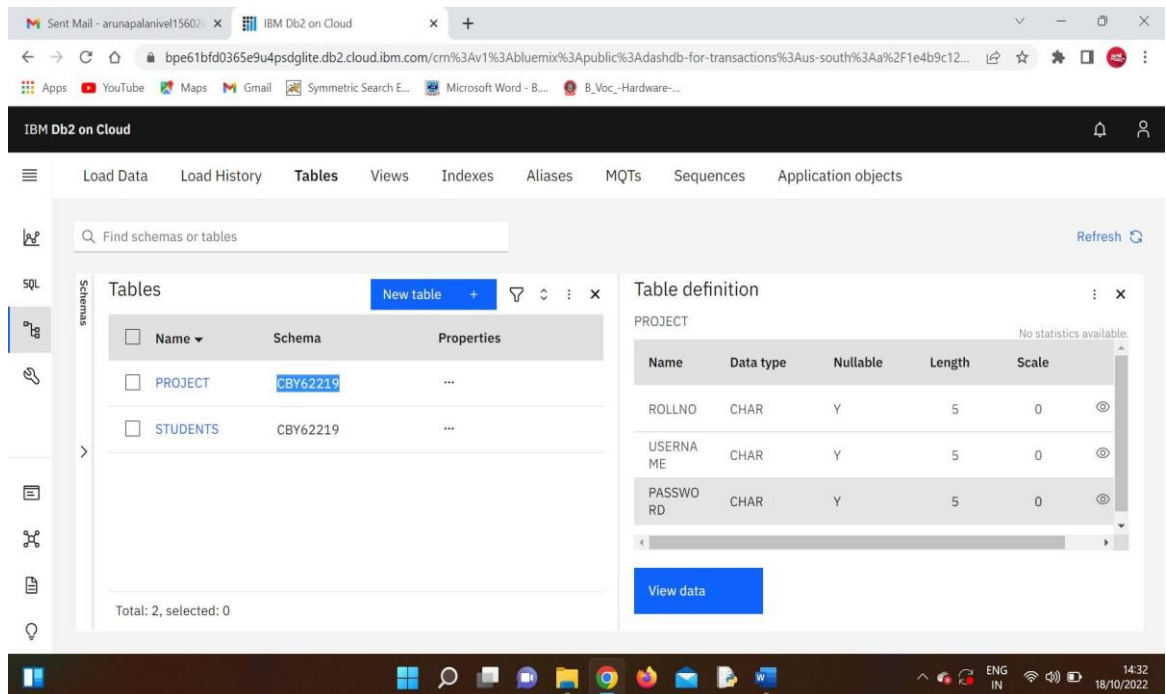
Assignment -2

IBM CLOUD DB2

Assignment Date	22 October, 2022
Student Name	Ramesh Krishnan N V
Project Name	Skill/Job Recommender Application
Maximum Marks	2 Marks

Questions:

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



2. Perform UPDATE,DELETE Queries with user table.

UPDATE TABLE:-

Service Details - IBM Cloud x IBM Db2 on Cloud x +

bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/cm%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2F1e4b9c12...

Apps YouTube Maps Gmail Symmetric Search E... Microsoft Word - B... B_Voc_Hardware...

IBM Db2 on Cloud

Data objects My script

Filter objects

SQL

CBY62219

*Untitled - 1 x +

Beta Classic

Syntax assistant Run all

```
1 INSERT INTO students values('4','sus','90');
2 DELETE FROM students WHERE NAME='suz';
3 DELETE FROM students WHERE MARKS='82';
4
5
```

History

Find history

Script	Date	Status	Runtime
Untitled - 1	Oct 18, 2022 1:09:41 PM	1 2	0.012 s
INSERT INTO students values('4','sus','90')			0.006 s
DELETE FROM students WHERE NAME='suz'			0.003 s
DELETE FROM students WHERE MARKS='82'			0.003 s
Untitled - 1	Oct 18, 2022 1:09:13 PM	2 2	0.021 s

33°C Partly sunny

13:16 18/10/2022

Service Details - IBM Cloud x IBM Db2 on Cloud x +

bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/cm%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2F1e4b9c12...

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IBM Db2 on Cloud

Load Data Load History **Tables** Views Indexes Aliases MQTs Sequences Application objects

CBY62219.STUDENTS

Back

Export to CSV

ROLLNO	NAME	MARKS
4	sus	90

33°C Partly sunny

13:15 18/10/2022

DELETE TABLE:-

Service Details - IBM Cloud x IBM Db2 on Cloud x +

bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/crm%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2F1e4b9c12...

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Beta Classic

Syntax assistant Run all

```

1 INSERT INTO students values('4','sus','90');
2 DELETE FROM students WHERE NAME='sur';
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```

History

Find history

Script	Date	Status	Runtime
Untitled - 1	Oct 18, 2022 1:09:41 PM	✓ 1 ⚠ 2	0.012 s
INSERT INTO students values('4','sus','90')		✓	0.006 s
DELETE FROM students WHERE NAME='sur'		⚠	0.003 s
DELETE FROM students WHERE MARKS='82'		⚠	0.003 s
Untitled - 1	Oct 18, 2022 1:09:13 PM	✓ 2 ⚠ 2	0.021 s

33°C Partly sunny

13:16 18/10/2022

Service Details - IBM Cloud x IBM Db2 on Cloud x +

bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/crm%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2F1e4b9c12...

Apps YouTube Maps Gmail Symmetric Search E... Microsoft Word - B... B_Voc_-Hardware...

IBM Db2 on Cloud

Load Data Load History **Tables** Views Indexes Aliases MQTs Sequences Application objects

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Back

Export to CSV

ROLLNO	NAME	MARKS
4	sus	90

33°C Partly sunny

13:15 18/10/2022

3. CONNECT PYTHON CODE TO DB2.

NOTE:- Question 4 contains Question 3 answer

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

Answers

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=Db2New;HOSTNAME=19af6446-6171-4641-8aba-
9dcff8e1b6ff.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=30699;USERNAM
E=kgb92696;PASSWORD=3IlWYGyU3bMIvwnX;SECURITY=SSL;SSLSERVERCERTIFICATE=DigiCer
tGlobalRootCA.crt;", "", "")

@app.route("/", methods=['GET',
'POST']) def register():    msg = ''
if request.method == 'POST':
    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 = 'name must contain only characters 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, password)
            ibm_db.execute(prepare_stmt)
            msg = 'You have successfully registered !'
            elif request.method == 'POST':
                msg = 'Please fill out the form !'
                return render_template('register.html', msg=msg)

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

            msg = 'Logged in successfully !'
            return render_template('dashboard.html', msg=msg)
        else:
            msg = 'Incorrect username / password !'
            return render_template('login.html', msg=msg)

if __name__ == '__main__':
    app.run(host='0.0.0.0')
    # app.run(debug=True)

```

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">
  <title>Smart Fashion register</title>

  <!-- bootstrap css cdn -->    <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css"
"
    integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
crossorigin="anonymous">
  <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/fontawesome/4.7.0/css/font-
awesome.css">
  <!-- css stylesheet -->
  <link rel="stylesheet" href="style.css">
  <!-- font styles cdn -->
  <link rel="preconnect" href="https://fonts.gstatic.com">
  <link
href="https://fonts.googleapis.com/css2?family=Alegreya&display=swap"
rel="stylesheet">
  <link
href="https://fonts.googleapis.com/css2?family=Alegreya:wght@600&display=swap"
rel="stylesheet">
</head>

<body>
  <!-- bootstrap navbar -->
  <!-- navbar ends -->
  <!-- Login form -->
  <div class="login text-center mt-5">
    <form action="/" method="post">
      <h2 class="form-text-h2"> Register Form </h2>
      <div class="msg">{{ msg }}</div>
      <input type="text" class="form-control" name="username"
placeholder="Enter Your Username" id="username"
required>
      <input type="email" class="form-control" name="email"
placeholder="Enter Your Email ID" id="email" required>
      <input type="password" class="form-control" name="password"
placeholder="Enter Your Password" id="password"
required>
      <button type="submit" id="button" class="btn btn-primary">
Register </button>

```

```

        <div class="note mt-3 text-center">
            <!--Register form -->
            <p> already have an account ? please login <a
href="/login">login! </a> </p>

        </div>
    </form>

</div>

</body>
</html>

```

Login.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>Skill and Job Recommender</title>
    <!-- favicon -->
    <!-- <link rel="shortcut icon" href="/assets/img/favicon.ico"
type="image/x-icon"> -->
    <!-- <link rel="icon" href="/assets/img/favicon.ico" type="image/x-icon">
-->
    <link rel="icon" type="image/png" sizes="16x16"
href="/assets/img/favicon32x32.png">
    <!-- bootstrap css cdn -->
    <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css"
"
    integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
crossorigin="anonymous">
    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/fontawesome/4.7.0/css/font-
awesome.css">
    <!-- css stylesheet -->
    <link rel="stylesheet" href="style2.css">
    <!-- font styles cdn -->
    <link rel="preconnect" href="https://fonts.gstatic.com">
    <link
href="https://fonts.googleapis.com/css2?family=Alegreya&display=swap"
rel="stylesheet">

```

```

    <link
href="https://fonts.googleapis.com/css2?family=Alegreya:wght@600&display=swap"
rel="stylesheet">
</head>

<body>

    <div class="login text-center mt-5">

        <form action="/login" method="post">
            <h2 class="form-text-h2"> Login Form </h2>
            <div class="msg">{{ msg }}</div>
            <div class="form-group mb-3">
                <label class="label" for="username">Username</label>
                <input type="text" class="form-control" placeholder="Username"
name="username" required>
            </div>
            <div class="form-group mb-3">
                <label class="label" for="password">Password</label>
                <input type="password" class="form-control"
placeholder="Password" name="password" required>
            </div>

            <button type="submit" id="button" class="btn btn-primary"> Login
</button>

            <div class="note mt-3 text-center">
                <!--Register form -->
                <p> Don't have an account yet? Click here to
<a href="/">register! </a> </p>
            </div>
        </form>
    </div>

</body>
</html>

```


Style.css

```
* {  
  margin: 0;  
padding: 0;  
} body  
{  
  color: #444444;    background: linear-gradient(-45deg, #EE7752,  
#E73C7E, #23A6D5, #23D5AB);    background-size: 400% 400%;    position:  
relative;    display: flex;    flex-direction: column;
```

```

    align-items: center;    justify-content:
center;    animation: anime 10s ease-in-out
infinite;
}
@keyframes anime{
    0%{        background-position:
0 50%;
    } 50%{        background-
position: 100% 50%;    }
100%{        background-position: 0
50%;
    } } form { display:
flex;    flex-direction:
column; align-items:
center;    justify-
content: center;
background-color: white;
width: 40%; height:
450px;    border-radius:
50px;    margin: 100px;
gap: 25px;

} h2 {    font-size:
large;    font-weight:
bolder;
} input {    width:
80% !important;
} div {    display: flex;
align-items: center;
justify-content: center;
flex-direction: column;
width: 90%;
}

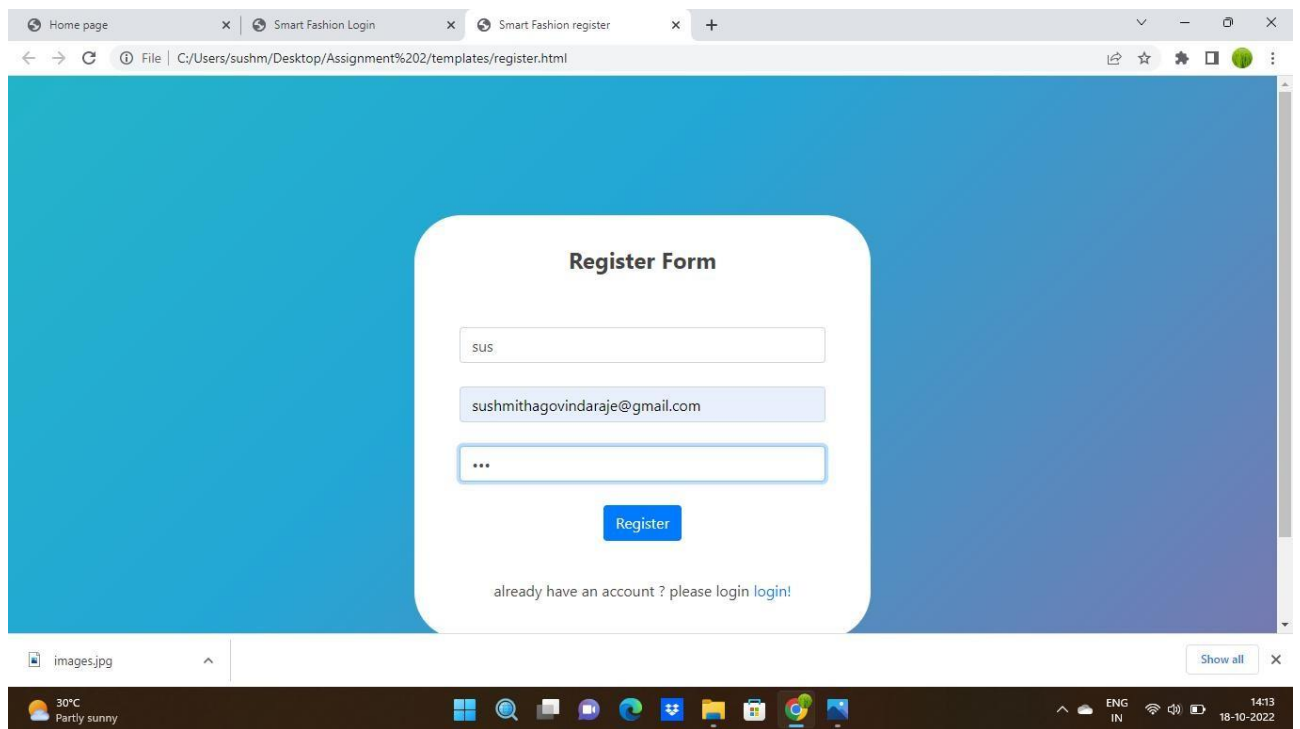
.form-text-vk {    font-
size: small;

```

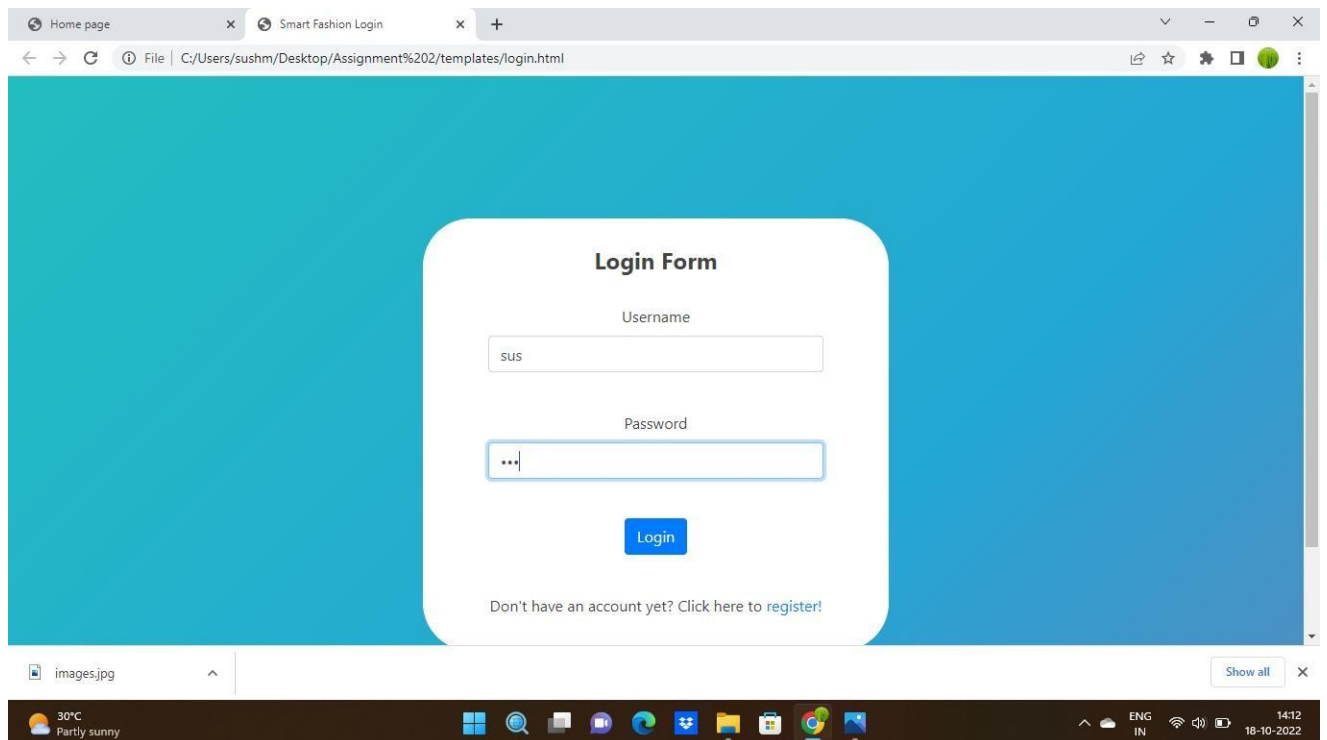
```
padding-bottom: 10px;
}

.form-text-h2 {      font-size: x-large;      padding-top: 10px;
}
```

OUTPUT:- REGISTRATION PAGE:-



LOGIN PAGE:-



WELCOME PAGE:-

