

## Assignment -2

### IBM CLOUD DB2

Assignment Date	29 September 2022
Student Name	SURUTHI R
Student Roll Number	613019104083
Maximum Marks	2 Marks

#### Questions:

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

The screenshot shows the IBM Db2 on Cloud web interface. The 'Tables' tab is active, displaying a list of tables. The 'PROJECT' table is selected, and its definition is shown on the right. The table has columns: ROLLNO (CHAR, 5, NULLABLE), USERNAME (CHAR, 5, NULLABLE), and PASSWORD (CHAR, 5, NULLABLE).

2. Perform UPDATE,DELETE Queries with user table.

#### UPDATE TABLE:-

The screenshot shows the IBM Db2 on Cloud web interface. The 'Data objects' tab is active, displaying a list of data objects. The 'CBY62219' table is selected. The 'Script' editor shows SQL queries: INSERT INTO PROJECT values('5','suz','789'); and DELETE FROM PROJECT WHERE USERNAME='naz'. The 'History' tab shows the execution of these queries.

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

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

CBY62219.PROJECT Back

Export to CSV

ROLLNO	USERNAME	PASSWORD
5	sur	789

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## DELETE 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...

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IBM Db2 on Cloud

Data objects My script

Filter objects

CBY62219

\*Untitled - 1 x + Beta Classic

Syntax assistant Run all

```

1 INSERT INTO PROJECT values('5','sur','789');
2 DELETE FROM PROJECT WHERE USERNAME='naz';
3
4
5

```

History

Find history

Script	Date	Status	Runtime
Untitled - 1	Oct 18, 2022 1:24:02 PM	1 1	0.011 s
INSERT INTO PROJECT values('5','sur','789')			0.008 s
DELETE FROM PROJECT WHERE USERNAME='naz'			0.003 s
Untitled - 1	Oct 18, 2022 1:23:58 PM	1	0.004 s
DELETE FROM PROJECT WHERE USERNAME='naz'			0.004 s

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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 - E... B\_Voc\_Hardware...

IBM Db2 on Cloud

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

CBY62219.PROJECT Back

Export to CSV

ROLLNO	USERNAME	PASSWORD
5	sur	789

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### 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']
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'[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>Skill and Job Recommender 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="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 RecommenderLogin</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;
```

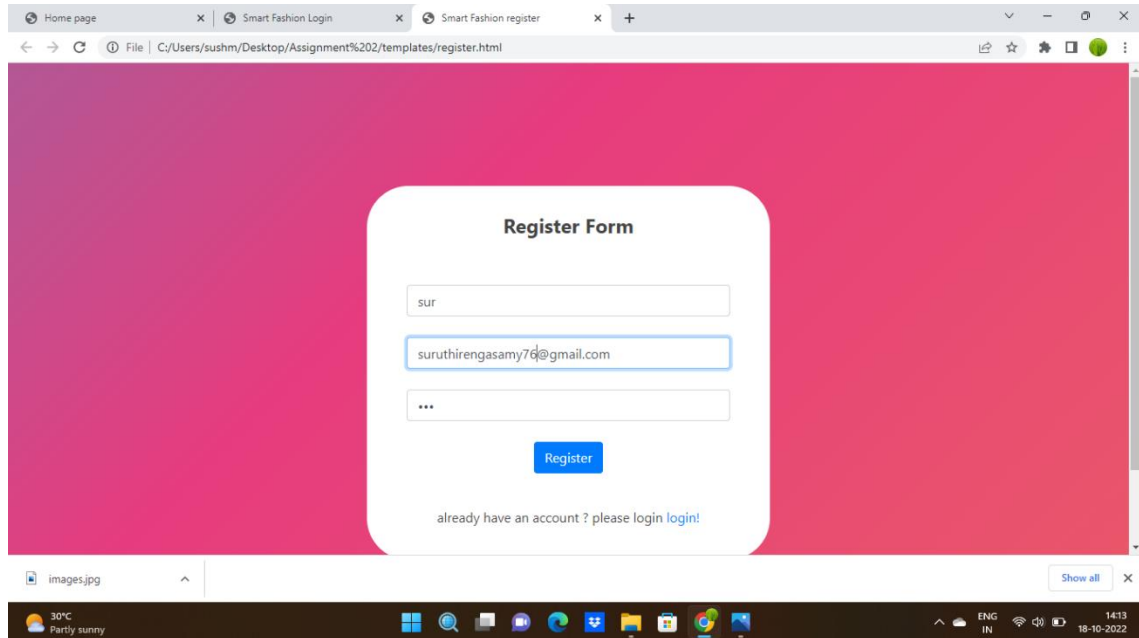
```
padding-bottom: 10px;
}

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



}

## OUTPUT:- REGISTRATION PAGE:-



The screenshot displays a web browser window with three tabs: 'Home page', 'Smart Fashion Login', and 'Smart Fashion register'. The active tab is 'Smart Fashion register', showing a registration form titled 'Register Form'. The form is centered on a pink background and contains three input fields: a text field with 'sur', an email field with 'suruthirengasamy7q@gmail.com', and a password field with three dots. Below the fields is a blue 'Register' button. At the bottom of the form, it says 'already have an account ? please login [login!](#)'. The browser's address bar shows the file path 'C:/Users/sushm/Desktop/Assignment%202/templates/register.html'. The Windows taskbar at the bottom shows the date as 18-10-2022 and the time as 14:13.

Register Form

sur

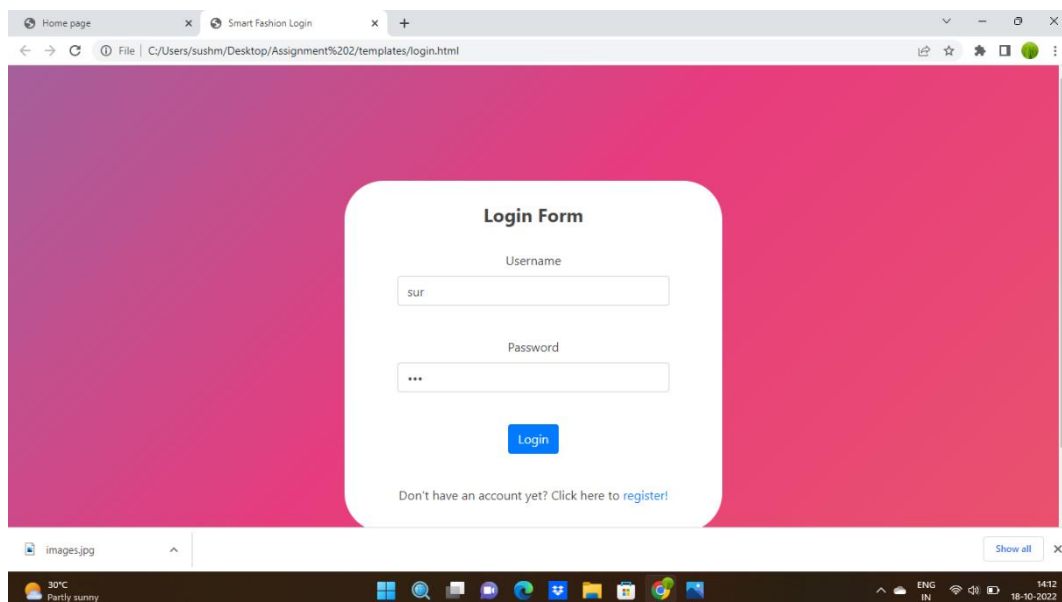
suruthirengasamy7q@gmail.com

...

Register

already have an account ? please login [login!](#)

## LOGIN PAGE:-



The screenshot displays a web browser window with three tabs: 'Home page', 'Smart Fashion Login', and 'Smart Fashion register'. The active tab is 'Smart Fashion Login', showing a login form titled 'Login Form'. The form is centered on a pink background and contains two input fields: a text field with 'sur' and a password field with three dots. Below the fields is a blue 'Login' button. At the bottom of the form, it says 'Don't have an account yet? Click here to [register!](#)'. The browser's address bar shows the file path 'C:/Users/sushm/Desktop/Assignment%202/templates/login.html'. The Windows taskbar at the bottom shows the date as 18-10-2022 and the time as 14:13.

Login Form

Username

sur

Password

...

Login

Don't have an account yet? Click here to [register!](#)

## WELCOME PAGE:-

