

Assignment -2

IBM CLOUD DB2

Assignment Date	29 September 2022
Student Name	NARMADHA J
Student Roll Number	613019104050
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. In the 'Tables' tab, the 'PROJECT' table is selected. The table definition panel on the right shows the following columns:

Name	Data type	Nullable	Length	Scale
ROLLNO	CHAR	Y	5	0
USERNAME	CHAR	Y	5	0
PASSWORD	CHAR	Y	5	0

A 'View data' button is located at the bottom of the table definition panel.

2. Perform UPDATE,DELETE Queries with user table.

UPDATE TABLE:-

The screenshot shows the IBM Db2 on Cloud web interface. In the 'Data objects' tab, the 'CBY62219' database is selected. The 'My script' tab is active, showing a SQL script with two queries:

```

1 INSERT INTO PROJECT values('2','naz','456');
2 DELETE FROM PROJECT WHERE USERNAME='suz';

```

The 'History' tab is also visible, showing a list of executed scripts with their dates, statuses, and runtimes.

Script	Date	Status	Runtime
Untitled - 1	Oct 18, 2022 1:22:51 PM	✓ 1	0.008 s
DELETE FROM PROJECT WHERE USERNAME='suz'		✓	0.008 s
Untitled - 1	Oct 18, 2022 1:22:27 PM	✓ 1	0.008 s
INSERT INTO PROJECT values('2','naz','456')		✓	0.008 s
Untitled - 1	Oct 18, 2022 1:21:59 PM	⚠ 1	0.007 s

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
2	nar	456

33°C Partly sunny 13:28 18/10/2022

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...

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

IBM Db2 on Cloud

Data objects My script

Filter objects

CBY62219

*Untitled - 1 x + Beta Classic

```
1 INSERT INTO PROJECT values('2','nar','456');
2 DELETE FROM PROJECT WHERE USERNAME='sui';
3
4
5
```

Syntax assistant Run selected

History

Find history

Script	Date	Status	Runtime
Untitled - 1	Oct 18, 2022 1:22:51 PM	✓ 1	0.008 s
DELETE FROM PROJECT WHERE USERNAME='sui'		✓	0.008 s
Untitled - 1	Oct 18, 2022 1:22:27 PM	✓ 1	0.008 s
INSERT INTO PROJECT values('2','nar','456')		✓	0.008 s
Untitled - 1	Oct 18, 2022 1:21:50 PM	⚠ 1	0.007 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 - 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
2	nar	456

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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:-

Home page x Smart Fashion Login x Smart Fashion register x +

File | C:/Users/sushm/Desktop/Assignment%202/templates/register.html

Register Form

[Register](#)

already have an account ? please login login!

images.jpg Show all

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LOGIN PAGE:-

Home page x Smart Fashion Login x +

File | C:/Users/sushm/Desktop/Assignment%202/templates/login.html

Login Form

Username

Password

[Login](#)

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

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WELCOME PAGE:-

