

Assignment -2

IBM CLOUD DB2

Assignment Date	26 OCTOBER 2022
Student Name	PRIYADHARSHIKA R
Student Roll Number	713319CS112
Maximum Marks	2 Marks

Questions:

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

The screenshot shows the IBM Db2 on Cloud console. The 'Tables' tab is selected, displaying a list of tables in the 'TBC72932' schema. The 'USERD' table is highlighted. The 'Table definition' pane on the right shows the structure of the 'USERD' table:

Name	Data type	Nullable	Length	Scale
USERNAME	CHAR	Y	244	0
EMAIL	CHAR	Y	244	0
PASSWORD	CHAR	Y	244	0
NUMBER	CHAR	Y	244	0

A 'View data' button is visible at the bottom of the table definition pane.

The screenshot shows the data view for the 'TBC72932.USERD' table. The data is displayed in a table with the following columns: USERNAME, EMAIL, PASSWORD, and NUMBER. There are three rows of data.

USERNAME	EMAIL	PASSWORD	NUMBER
Mridhul	mridhulvinu123@gmail.com	D7M5%lw4n6Oi	6380951390
Pragadish	pragadish@gmail.com	VfrA&83Hn/U6	965487555
Priyadharshika R	Priyadharshika@gmail.com	\$yi\$qVVN1z07	9566482047

An 'Export to CSV' button is visible in the top right corner of the data view.

2. Perform UPDATE, DELETE Queries with user table.

UPDATE TABLE:

The screenshot shows the IBM Db2 on Cloud SQL editor interface. On the left, the 'Data objects' pane shows a table named 'TBC72932'. The main editor area displays an SQL script with three lines: 1. UPDATE USERD, 2. SET NUMBER = '6359885212', and 3. WHERE USERNAME = 'Pragadish'. Below the editor, the 'History' pane shows a table of executed queries.

Script	Date	Status	Runtime
Untitled - 1	Nov 9, 2022 12:58:14 PM	✓ 1	0.006 s
UPDATE USERD SET NUMBER = '6359885212' WHERE USERNAME = 'Pragadish'		✓	0.006 s
Untitled - 1	Nov 9, 2022 12:56:34 PM	✓ 1	0.005 s
UPDATE USERD SET NUMBER = '965487555' WHERE USERNAME = 'Pragadish'		✓	0.005 s

The screenshot shows the IBM Db2 on Cloud 'Tables' view for the table 'TBC72932.USERD'. The table structure is displayed with columns: USERNAME, EMAIL, PASSWORD, and NUMBER. Two rows of data are visible.

USERNAME	EMAIL	PASSWORD	NUMBER
Mridhul	mridhulvinu123@gmail.com	D7M\$%lw4n6Qi	6380951390
Pragadish	pragadish@gmail.com	VfrA&83Hn!U6	6359885212

DELETE TABLE:

IBM Db2 on Cloud

Load DataLoad HistoryTablesViewsIndexesAliasesMQTsSequencesApplication objects

TBC72932.USERD

Back

Export to CSV

USERNAME	EMAIL	PASSWORD	NUMBER
Mridhul	mridhulvinu123@gmail.com	D7M\$%lw4n6Oi	6380951390
Pragadish	pragadish@gmail.com	VfrA&83HnIU6	965487555
Priyadharshika R	Priyadharshika@gmail.com	\$yi\$qVVN1z07	9566482047

IBM Db2 on Cloud

Data objectsSaved objects

Filter objects

TBC72932

*Untitled - 1

1DELETE FROM USERD WHERE USERNAME='Priyadharshika R'

History

Find history

Script	Date	Status	Runtime
Untitled - 1	Nov 9, 2022 12:59:56 PM	1	0.00s
DELETE FROM USERD WHERE USERNAME='Priyadharshika R'			0.00s

IBM Db2 on Cloud

Load DataLoad HistoryTablesViewsIndexesAliasesMQTsSequencesApplication objects

TBC72932.USERD

Back

Export to CSV

USERNAME	EMAIL	PASSWORD	NUMBER
Mridhul	mridhulvinu123@gmail.com	D7M\$%lw4n6Oi	6380951390
Pragadish	pragadish@gmail.com	VfrA&83HnIU6	6359885212

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

app = Flask(__name__)

dsn_hostname = "815fa4db-dc03-4c70-869a-
a9cc13f33084.bs2io90l08kqb1od8lcg.databases.appdomain.cloud"
dsn_uid = "tbc72932"
dsn_pwd = "4LioQzrIBnfCt6c"
dsn_driver = "{IBM DB2 ODBC DRIVER}"
dsn_database = "BLUDB"
dsn_port = "30367"
dsn_security = "SSL"
dsn = ("DRIVER={0};"
"DATABASE={1};"
"HOSTNAME={2};"
"PORT={3};"
"UID={4};"
"PWD={5};"
"SECURITY={6};").format(dsn_driver,dsn_database,dsn_hostname,dsn_port,dsn_uid,dsn_pwd,dsn_security)
print(dsn)
try:
    conn = ibm_db.pconnect(dsn,"","")
    print("success")
except:
    print(ibm_db.conn_errormsg())

@app.route("/") , methods=['GET', 'POST'])
def register():
    if request.method == 'POST':
        sql_stmt = "insert into USER values(?,?,?,?)"
        stmt = ibm_db.prepare(conn, sql_stmt)
        username = request.form['username']
        email = request.form['email']
        password = request.form['password']
        number = request.form['number']
        ibm_db.bind_param(stmt, 1, username)
        ibm_db.bind_param(stmt, 2, email)
        ibm_db.bind_param(stmt, 3, password)
        ibm_db.bind_param(stmt, 4, number)
        try:
```

```

        ibm_db.execute(stmt)
        return redirect('/')
    except:
        print(ibm_db.stmt_errormsg())

    return render_template('index.html')

@app.route("/login", methods=('GET', 'POST'))
def login():
    if request.method == 'POST':
        username = request.form['username']
        password = request.form['password']
        query = "select COUNT(*) from user where username='"+username+"' and
password='"+password+"'"
        stmt5 = ibm_db.exec_immediate(conn, query)
        row = ibm_db.fetch_tuple(stmt5)
        if(row[0] ==1 ):
            return redirect("/shop/")
    return render_template("index.html")

@app.route("/shop/" , methods=['GET', 'POST'])
def shop():
    sql = "SELECT * FROM job"
    job_name = []
    job_location = []
    job_role = []
    job_number = []
    job_salary = []
    job_image = []
    stmt = ibm_db.exec_immediate(conn, sql)
    dictionary = ibm_db.fetch_assoc(stmt)
    while dictionary != False:
        job_name.append(dictionary["NAME"])
        job_location.append(dictionary["LOCATION"])
        job_role.append(dictionary["ROLE"])
        job_number.append(dictionary["NUMBER"])
        job_salary.append(dictionary["SALARY"])
        job_image.append(dictionary["IMAGE"])
        dictionary = ibm_db.fetch_assoc(stmt)
    return render_template('shop.html', len = len(job_name), job_name = job_name,
job_location = job_location, job_role = job_role, job_number = job_number,
job_salary = job_salary, job_image = job_image)
if __name__ == "__main__":
    app.run(debug=True, host='0.0.0.0')

```

Index.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>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/font-
awesome/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>
      <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.html">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>Smart Fashion Login</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/favicon-
32x32.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/font-
awesome/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>

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

        <form action="/login" method="post">
            <h2 class="form-text-h2"> Login</h2>
            <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="reg.html">register! </a> </p>
    </div>
</form>
</div>

</body>

</html>

```

Style.css

```

* {
    margin: 0;
    padding: 0;
}

body {
    background-color: aqua !important;
    display: flex;
    flex-direction: column;
    align-items: center;
    justify-content: center;
}

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 page:

Register Form

Enter Your Username

Enter Your Email ID

Enter Your Password

Register

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

Login Page:

Login

Username


Password


Login


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


Welcome Page:


Job Recommendation

[Home](#)[About](#)[Contact](#)[Profile](#)

**Wipro - Bengaluru (5.0 LPA)**
Software Engineer
Contact: +91(80)46827999 [REGISTER](#)

**ACCENTURE - Chennai (4.5 LPA)**
Software Engineer
Contact: +918061180002 [REGISTER](#)

**ACCENTURE - Chennai (4.0 LPA)**
Programmer Analyst
Contact: +91638051390 [REGISTER](#)



Data Base Table

IBM Db2 on Cloud

Load DataLoad HistoryTablesViewsIndexesAliasesMQTSSequencesApplication objects

SQL

Export to CSV

TBC72932.USERD

Back

USERNAME	EMAIL	PASSWORD	NUMBER
Mridhul	mridhulvinu123@gmail.com	D7MS%lw4n6Oi	6380951390
Pragadish	pragadish@gmail.com	VfrA&83Hn/U6	6359885212
Priyadharshika R	Priyadharshika@gmail.com	\$yiSqVVN1z07	9566482047