

-----Assignment -2

IBM CLOUD DB2

Assignment Date	3 November 2022
Student Name	SURESH KUMAR D
Student Roll Number	95221903064
Maximum Marks	2 Marks

Questions:

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

The image displays two screenshots of the IBM Db2 on Cloud console interface.

The top screenshot shows the 'Tables' tab. A table named 'USERTABLE' is listed under the schema 'DTP46044'. The table definition is shown on the right, with the following columns:

Name	Data type	Nullable	Length	Scale
USERNAME	CHAR	Y	5	0
ROLLNUMBER	INTEGER	Y		0
EMAIL	CHAR	Y	5	0
PASSWORD	VARCHAR	Y	32	0

The bottom screenshot shows the 'DTP46044.USERTABLE' view. The view is empty, and a message states: 'There is no data here yet'.

2. Perform UPDATE,DELETE Queries with user table.

UPDATE TABLE:-

IBM Db2 on Cloud

Data objects My script

Filter objects

DTP46044

Untitled - 1

```
1 INSERT INTO USERTABLE VALUES ('VK',21,'VK@gamil.com','1234')
```

History

Find history

Script	Date	Status	Runtime
Untitled - 1	Oct 10, 2022 12:51:13 PM	1	0.018 s
INSERT INTO USERTABLE VALUES ('VK',21,'VK@gamil.com','1234')			0.018 s

IBM Db2 on Cloud

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

DTP46044.USERTABLE

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Export to CSV

USERNAME	ROLLNO	EMAIL	PASSWORD
VK	21	VK@gamil.com	1234

DELETE TABLE:-

IBM Db2 on Cloud

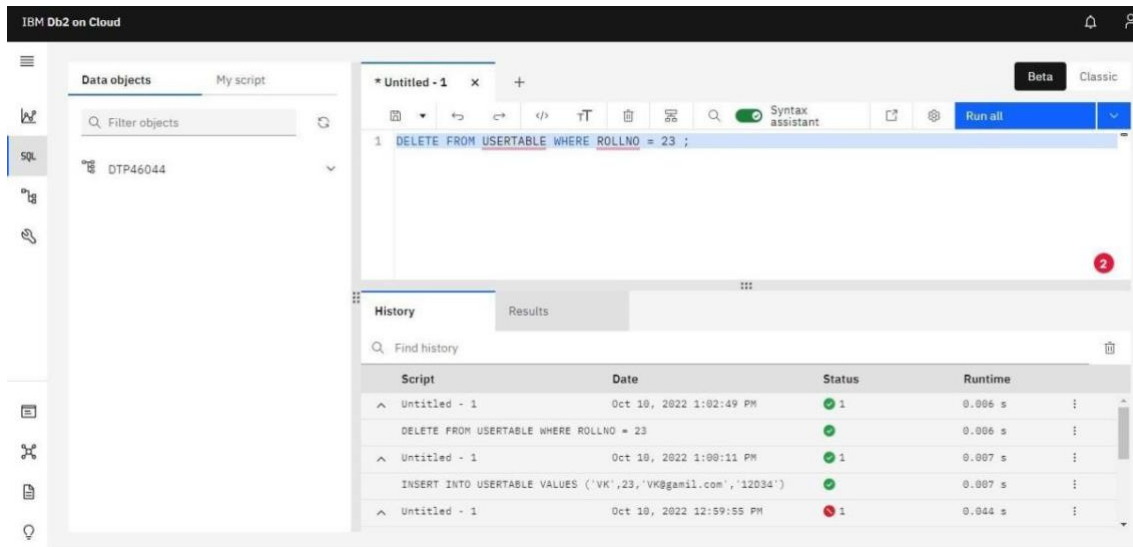
Load Data Load History **Tables** Views Indexes Aliases MQTs Sequences Application objects

DTP46044.USERTABLE

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Export to CSV

USERNAME	ROLLNO	EMAIL	PASSWORD
SANJAI	49	sanjai31@gmail.com	12453
DHARMA	10	dharma12@gmail.com	4253@12



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=bludb;HOSTNAME=fbd88901-ebdb-4a4f-a32e-
9822b9fb237b.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32731;USERNA
M
E=ntp46044;PASSWORD=95soX0sZGhb4ToUj;SECURITY=SSL;SSLSERVERCERTIFICATE=DigiCe
r 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'^[a-zA-Z0-9]+$', email): msg
        = 'Invalid email address !'
    elif not re.match(r'^[A-Za-z0-9]+$', 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, email)
        ibm_db.bind_param(prepare_stmt, 3, 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.cs
s"
    integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpsL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
crossorigin="anonymous">

```

```

    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/fontawesome/4.7.0/css/fontawesome.css
">
    <!-- css stylesheet -->
    <link rel="stylesheet" href="/static/css/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>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.cs s
" integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
crossorigin="anonymous">
  <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/fontawesome/4.7.0/css/fontawesome.css"
>
  <!-- css stylesheet -->
  <link rel="stylesheet" href="/static/css/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 { background-color: aqua
!important; display: flex;
flexdirection: column; align-items:
center; justify-content: center;
}

form { display: flex;
flexdirection: 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; fontweight: bolder;
}

input { width: 80% !important;
}

div { display: flex; alignitems: center; justifycontent: center;
flexdirection: column; width: 90%; }

.form-text-vk { fontsize: small; paddingbottom: 10px;
}

.form-text-h2 { fontsize: x-large; padding-top: 10px;
}

```

Output:registration

page:-

Register Form

SANJAI H


sanjaihari2002@gmail.com

Enter Your password

Register

already have an account ? please login login!

Login Page:-



A login form titled "Login Form" is centered on a solid blue background. The form is a white rounded rectangle. It contains a "Username" label above a text input field with the value "SANJAI H". Below this is a "Password" label above a password input field with masked characters "*****" and a toggle icon. A blue "Login" button is positioned below the password field. At the bottom of the form, there is a link that says "Don't have an account yet? Click here to register!"

Welcome Page:-



Data Base Table :-

IBM Db2 on Cloud

Load DataLoad HistoryTablesViewsIndexesAliasesMQTsSequencesApplication objects

DTP46044.USERTABLE

Back

Export to CSV

USERNAME	ROLLNO	EMAIL	PASSWORD
SANJAI	49	sanjai31@gmail.com	12453
DHARMA	10	dharmal2@gmail.com	4253@12