

Assignment -2

IBM CLOUD DB2

Assignment Date	29 September 2022
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Student Roll Number	613019104046
Maximum Marks	2 Marks

Questions:

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

The screenshot displays the IBM Db2 on Cloud web interface. The 'Tables' tab is active, showing a list of tables. The 'STUDENT' table is selected, and its definition is shown on the right. The table has four columns: USERNAME (CHAR, 5, nullable), ROLL NUMBER (INTEGER, nullable), EMAIL ID (VARCHAR, 32, nullable), and PASSWORD (VARCHAR, 32, nullable). The interface also shows a search bar for schemas and tables, and a 'View data' button.

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

2. Perform UPDATE,DELETE Queries with user table.

UPDATE TABLE:-

The screenshot shows the IBM Db2 on Cloud console interface. On the left, the 'Data objects' panel lists 'JRZ46343'. The main editor area, titled '*Untitled - 1', contains the SQL query: `INSERT INTO student values ('mona','46','mona@gmail.com','hardik');`. The 'History' panel at the bottom displays the execution details:

Script	Date	Status	Runtime
Untitled - 1	Oct 19, 2022 10:19:12 AM	✓ 1	0.000 s
INSERT INTO student values ('mona','46','mona@gmail.com','hardik')		✓	0.000 s

The screenshot shows the IBM Db2 on Cloud console displaying the 'JRZ46343.STUDENT' table. The table has four columns: USERNAME, ROLL NUMBER, EMAIL ID, and PASSWORD. The data row shows: mona, 46, mona@gmail.com, hardik. An 'Export to CSV' button is visible in the top right corner.

USERNAME	ROLL NUMBER	EMAIL ID	PASSWORD
mona	46	mona@gmail.com	hardik

DELETE TABLE:-

Service Details - IBM Cloud

IBM Db2 on Cloud

bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2F0b73012b1065427ba418d2302516f99%3A03590afc-7750-47a...

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IBM Db2 on Cloud

Data objects

My script

Filter objects

JRZ46343

Untitled - 1

Syntax assistant

Run all

```
1 INSERT INTO STUDENT values ('mona','46','mona@gmail.com','hardik');
2 INSERT INTO STUDENT values ('ram','47','ram@gmail.com','hardik');
3 DELETE FROM STUDENT WHERE USERNAME = 'mona';
```

History

Results

Find history

Script	Date	Status	Runtime
Untitled - 1	Oct 19, 2022 11:55:31 AM	3	0.020 s
INSERT INTO STUDENT values ('mona','46','mona@gmail.com','hardik')			0.006 s
INSERT INTO STUDENT values ('ram','47','ram@gmail.com','hardik')			0.006 s
DELETE FROM STUDENT WHERE USERNAME = 'mona'			0.008 s
Untitled - 1	Oct 19, 2022 11:53:16 AM	2	0.015 s

31°C Mostly sunny

Search the web

ENG IN 11:55 19-10-2022

Service Details - IBM Cloud

IBM Db2 on Cloud

bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2F0b73012b1065427ba418d2302516f99%3A03590afc-7750-47a...

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IBM Db2 on Cloud

Load Data

Load History

Tables

Views

Indexes

Aliases

MQTs

Sequences

Application objects

JRZ46343.STUDENT

Back

Export to CSV

USERNAME	ROLLNUMBER	EMAIL ID	PASSWORD
ram	47	ram@gmail.com	hardik
ram	47	ram@gmail.com	hardik
ram	47	ram@gmail.com	hardik

31°C Mostly sunny

Search the web

ENG IN 11:58 19-10-2022

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=k9b92696;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, 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>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="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 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/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="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 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;
```

```

        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;

```

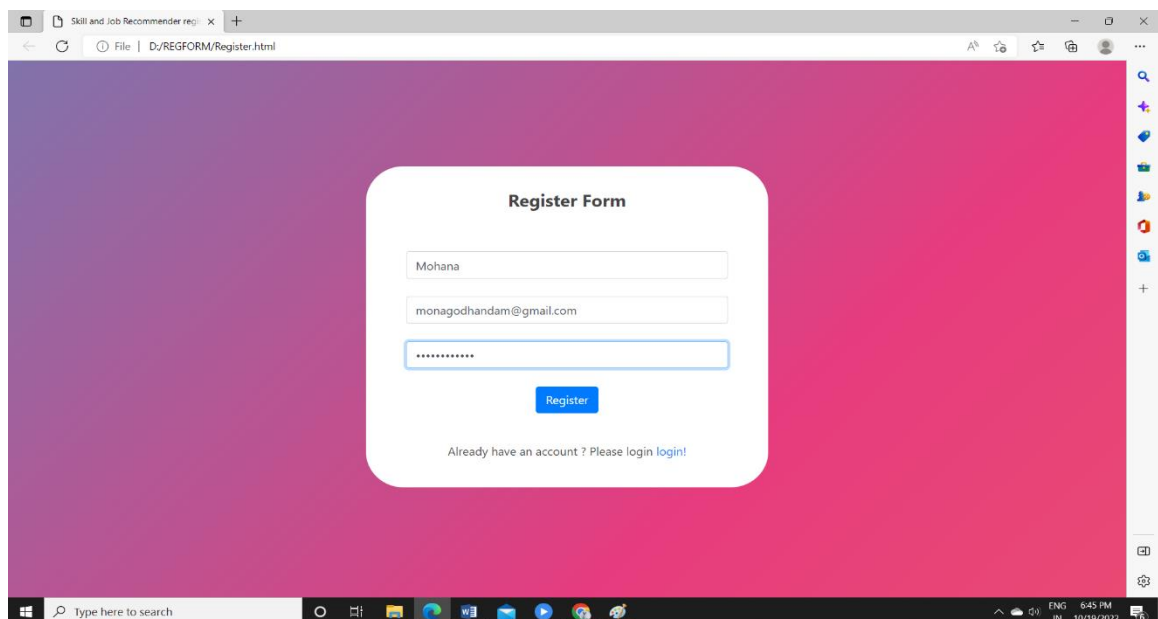
```
} body
{
    color: #444444;    background:linear-gradient(-45deg, #EE7752, #E73C7E,
#23A6D5, #23D5AB);    background-size: 400% 400%;    position: relative;
display: flex;    flex-direction: column;
```

```
padding-bottom: 10px;
}

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

OUTPUT:-

REGISTRATION PAGE:-



LOGIN PAGE:-

Login Form

Username
Mohana

Password

Login

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

WELCOME PAGE:-

