

Assignment -2

IBM CLOUD DB2

Assignment Date	26 OCTOBER 2022
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Student Roll Number	PNT2022TMID50535
Maximum Marks	2 Marks

Questions:

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

The screenshot shows the IBM Db2 on Cloud console. In the 'Tables' section, a table named 'USER' is listed under the schema 'ZLP37297'. The 'Table definition' pane on the right displays the table's structure:

Name	Data type	Nullable	Length	Scale
USERNAME	CHAR	Y	21	0
ROLLNUMBER	INTEGER	Y		0
EMAIL	CHAR	Y	18	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. In the 'Data objects' section, the 'USER' table is selected. The 'My script' pane shows an SQL insert statement:

```
INSERT INTO USER VALUES('JK',09,'JK1232gmail.com','1234')
```

The 'History' pane shows the execution of this script on Oct 24, 2022 at 1:11:15 PM, with a status of 'Success' and a runtime of 0.006 s.

IBM Db2 on Cloud

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

ZLP37297.USER

Back

Export to CSV

USERNAME	ROLLNUMBER	EMAIL	PASSWORD
DS	5	DINESH@GMAIL.COM	0987
JK	9	JK1232gmail.com	1234

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DELETE TABLE:-

IBM Db2 on Cloud

Data objects My script

Filter objects

ZLP37297

*Untitled - 1

1 DELETE FROM USER WHERE ROLLNUMBER = 5

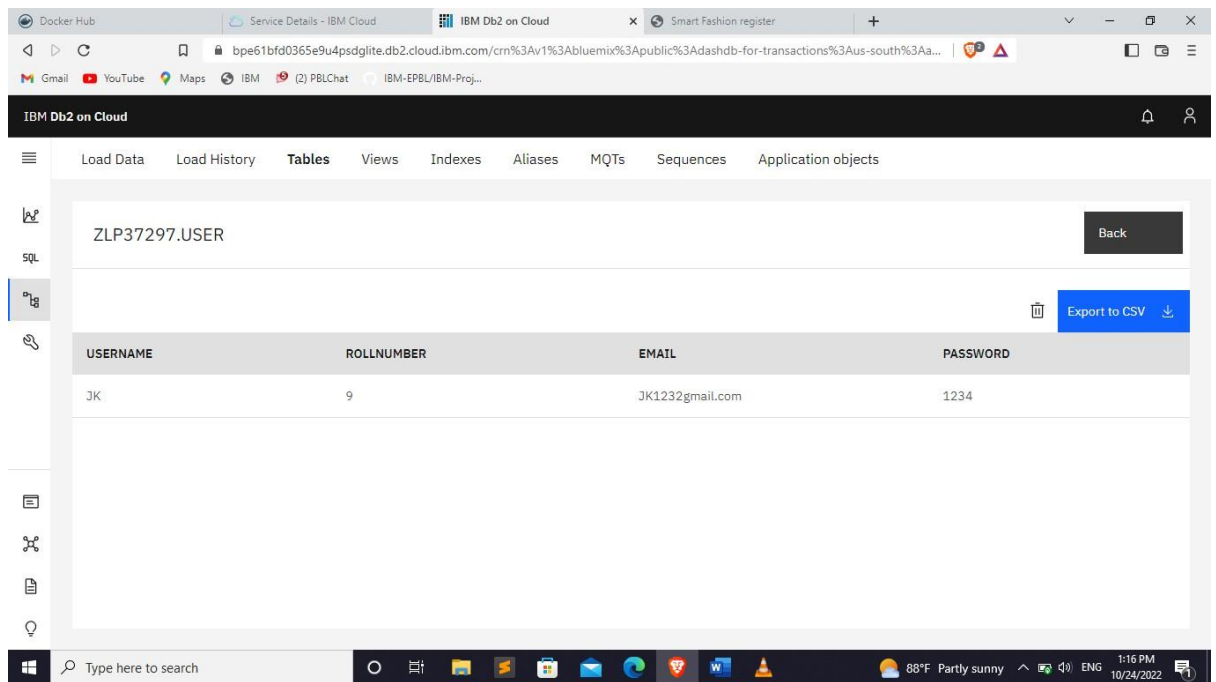
Run all

History

Script	Date	Status	Runtime
Untitled - 1	Oct 24, 2022 1:16:24 PM	✓ 1	0.008 s
DELETE FROM USER WHERE ROLLNUMBER = 5		✓	0.008 s
Untitled - 1	Oct 24, 2022 1:14:53 PM	✓ 1	0.004 s
INSERT INTO USER VALUES('DS',05,'DINESH@GMAIL.COM','0987')		✓	0.004 s
Untitled - 1	Oct 24, 2022 1:14:19 PM	✗ 1	0.015 s

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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=bludb;HOSTNAME=9938aec0-8105-433e-8bf9-
0fbb7e483086.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32459;SECURITY=S
SL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=zlp37297;PWD=so1e9MAIFSDzhxfs",
,")
```

```
@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 user 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 user 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 user 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.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="\static\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>
    <!-- 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.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="\static\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-image: url(https://ibmjk.s3.us-east.cloud-object-
storage.appdomain.cloud/pexels-pixabay-531880.jpg);
    background-color: #cccccc;

    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;

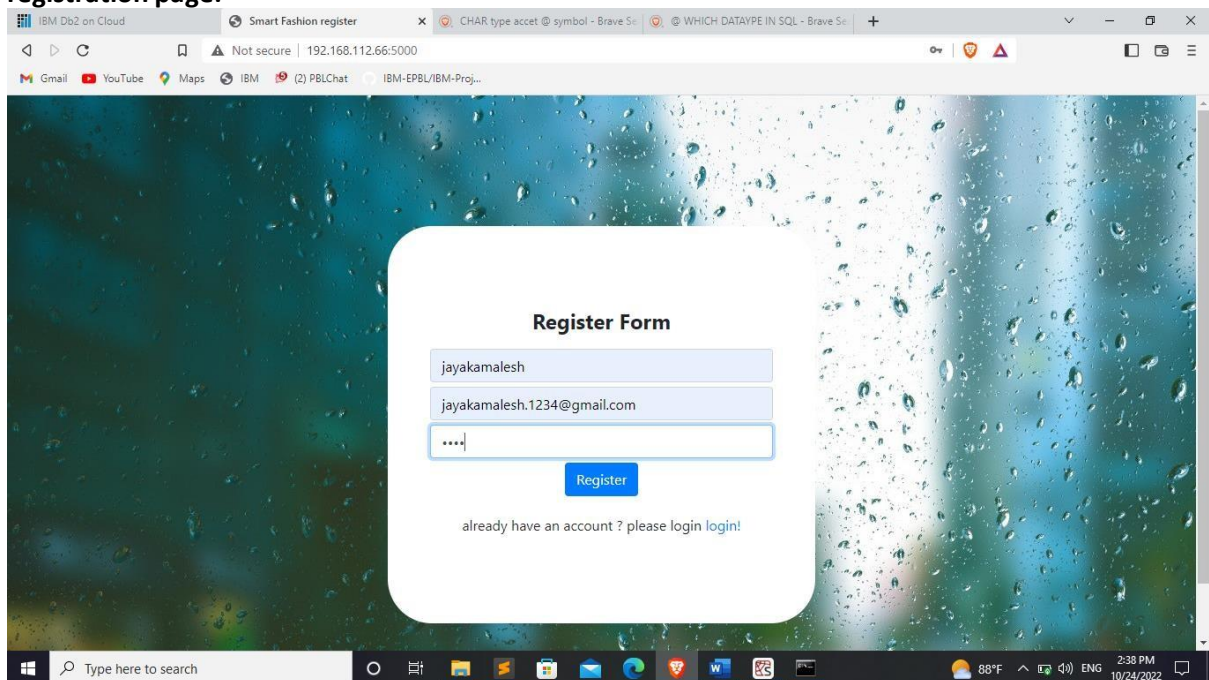
  width: 90%;
}

.form-text-vk {
  font-size: small;
  padding-bottom: 10px;
}

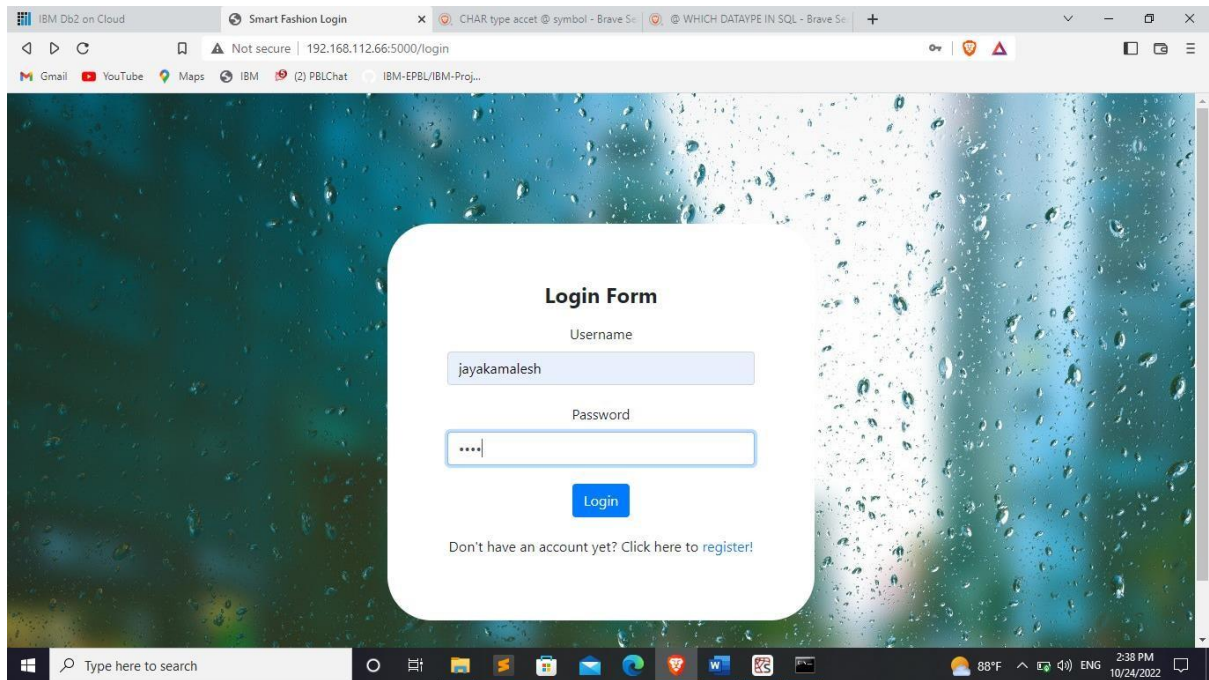
.form-text-h2 {
  font-size: x-large;
  padding-top: 10px;
}

```

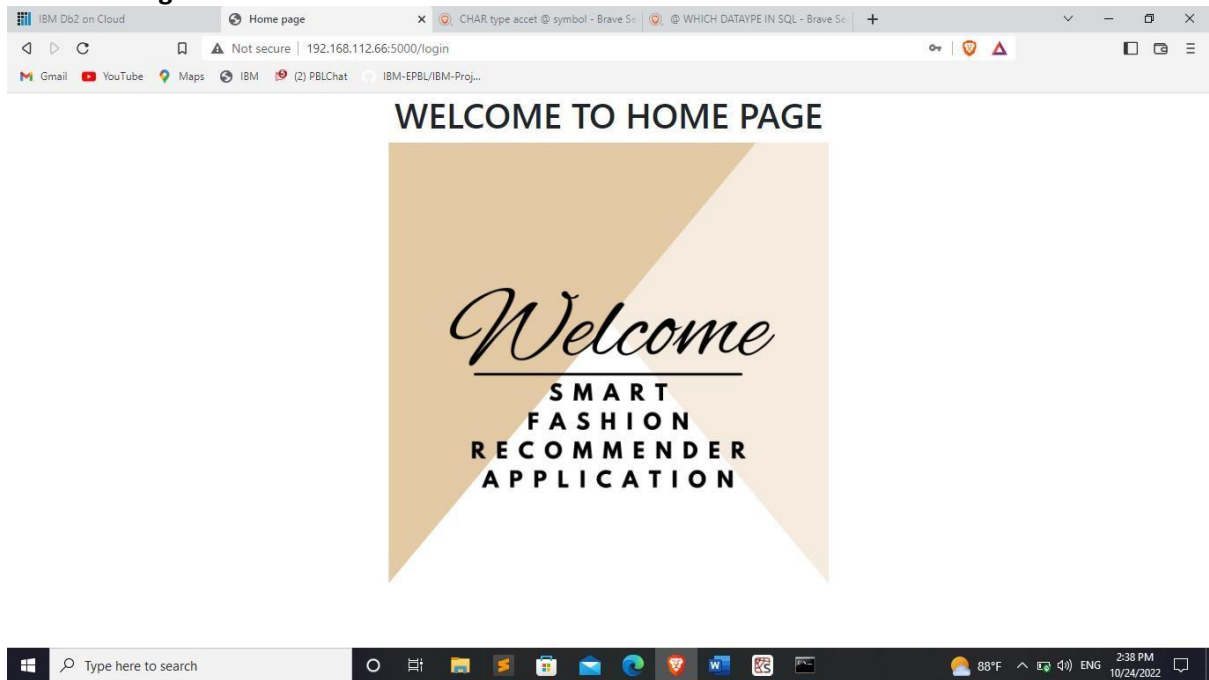
Output:- registration page:-



Login Page:-



Welcome Page:-



Data Base Table :-

IBM Db2 on Cloud

ibm cloud - Brave Search

bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa...

Gmail YouTube Maps IBM (2) PBLChat IBM-EPBL/IBM-Proj...

IBM Db2 on Cloud

Load DataLoad HistoryTablesViewsIndexesAliasesMQTsSequencesApplication objects

ZLP37297.USER

Back

Export to CSV

USERNAME	EMAIL	PASSWORD
jayakamalesh	jayakamalesh.1234@gmail.com	0000

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2:50 PM

10/24/2022