

Assignment -2
IBM CLOUD DB2

Assignment Date	29 September 2022
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Student Roll Number	812419104004
Maximum Marks	2 Marks

Questions:

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

2. Perform UPDATE,DELETE Queries with user table.

UPDATE TABLE:-

The screenshot displays the IBM Db2 on Cloud web interface. The top navigation bar includes tabs for Load Data, Load History, Tables, Views, Indexes, Aliases, MQTs, Sequences, and Application objects. The 'Tables' tab is active, showing a list of tables under the schema DTP46044. A table named 'USERTABLE' is selected. The 'Table definition' panel on the right shows the table's structure:

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

Below the table definition, there is a 'View data' button. The bottom part of the screenshot shows the 'DTP46044.USERTABLE' table view, which is currently empty, displaying a message: 'There is no data here yet'.

IBM Db2 on Cloud

Data objects My script

Filter objects

DTP46044

SQL

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

Windows taskbar: 12:51 10-10-2022

IBM Db2 on Cloud

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

DTP46044.USERTABLE

Back

Export to CSV

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

Windows taskbar: 12:51 10-10-2022

DELETE TABLE:-

IBM Db2 on Cloud

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

DTP46044.USERTABLE Back

Export to CSV

USERNAME	ROLLNO	EMAIL	PASSWORD
PARAMESH	21	VK@gamil.com	1234
VK	23	VK@gamil.com	12D34

IBM Db2 on Cloud

Data objects My script

Filter objects

DTP46044

Untitled - 1

```
1 DELETE FROM USERTABLE WHERE ROLLNO = 23 ;
```

Run all

History

Script	Date	Status	Runtime
Untitled - 1	Oct 10, 2022 1:02:49 PM	1	0.006 s
DELETE FROM USERTABLE WHERE ROLLNO = 23			0.006 s
Untitled - 1	Oct 10, 2022 1:00:11 PM	1	0.007 s
INSERT INTO USERTABLE VALUES ('VK',23,'VK@gamil.com','12D34')			0.007 s
Untitled - 1	Oct 10, 2022 12:59:55 PM	1	0.044 s

IBM Db2 on Cloud

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

DTP46044.USERTABLE Back

Export to CSV

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

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;USERNAM
E=ntp46044;PASSWORD=95soX0sZGhb4ToUj;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 =?"
msg = 'Logged in successfully !'

        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 !'
        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/fontawesome/4.7.0/css/font-
awesome.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.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="/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;
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%;
}

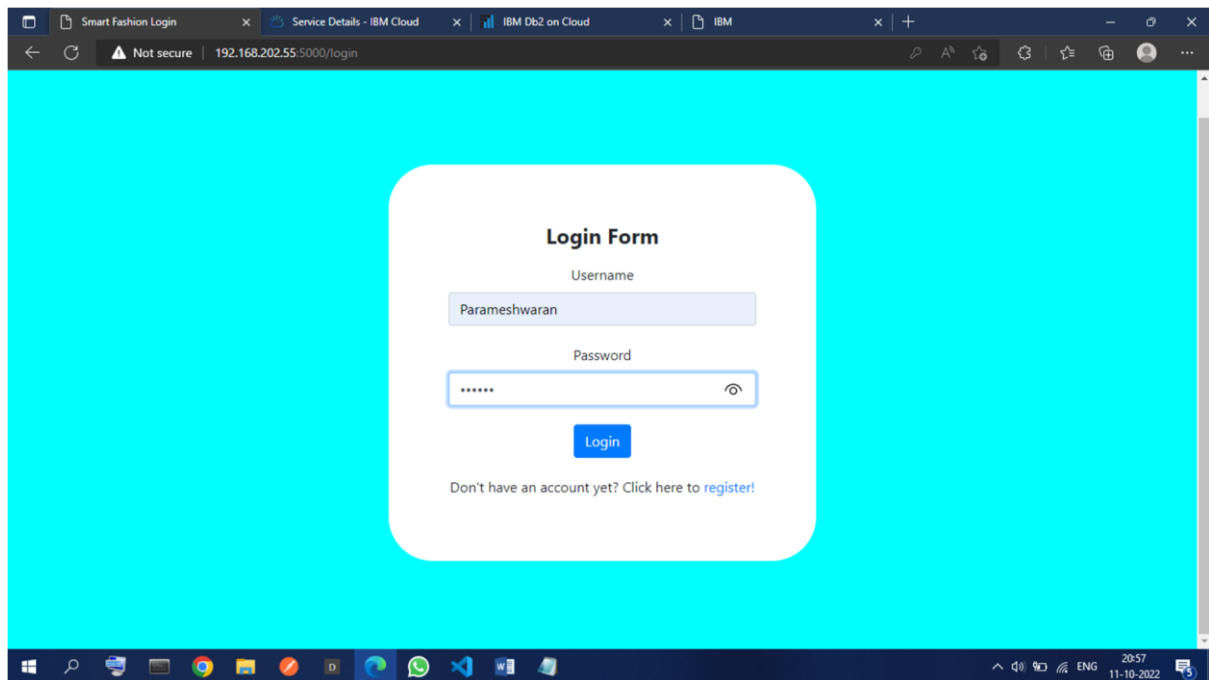
.form-text-vk {      font-
size: small;
padding-bottom: 10px;
```

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

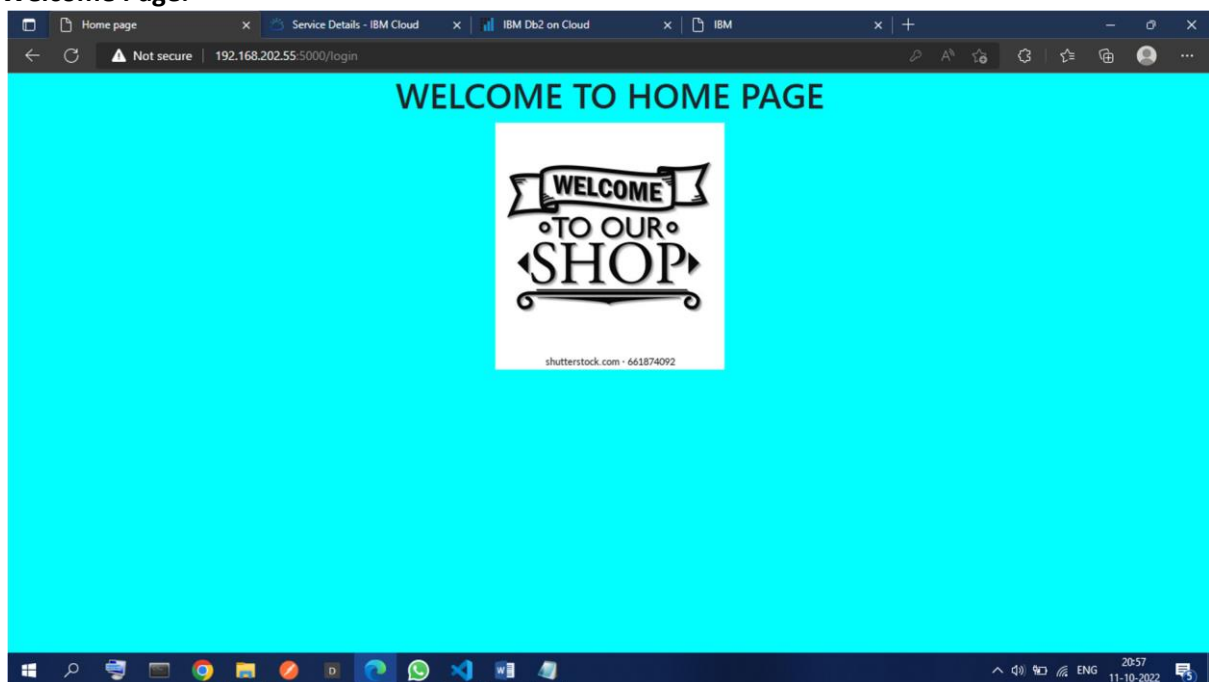
**Output:- registration
page:-**

The screenshot shows a web browser window with multiple tabs. The active tab is 'Smart Fashion register'. The address bar shows 'Not secure | 192.168.202.55:5000'. The main content area has a bright blue background. In the center, there is a white rounded rectangle containing the 'Register Form'. The form has three input fields: the first contains 'Parameshwaran', the second contains 'parameshvk3232@gmail.com', and the third is labeled 'Enter Your Password'. Below the fields is a blue 'Register' button. At the bottom of the form, it says 'already have an account ? please login login!'. The browser's taskbar is visible at the bottom, showing various application icons and the system clock indicating 20:56 on 11-10-2022.

Login Page:-



Welcome Page:-



Data Base Table :-

Home pageService Details - IBM CloudIBM Db2 on CloudIBM

https://bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2F4bf...

IBM Db2 on Cloud

Load DataLoad HistoryTablesViewsIndexesAliasesMQTsSequencesApplication objects

SQL

Export to CSV

DTP46044.USERS

USERNAME	EMAIL	PASSWORD
Parameshwaran	parameshvk3232@gmail.com	123432

20:5711-10-2022