

## Assignment -2

IBM CLOUD DB2

Assignment Date	29 September 2022
Student Name	Dharvish Mohaideen
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Maximum Marks	2 Marks

### Questions:

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

IBM Db2 on Cloud

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

Find schemas or tables Refresh

**Tables** New table

Name	Schema	Properties
USERTABLE	DTP46044	...

Total: 1, selected: 1


**Table definition**

USERTABLE No statistics available.

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

View data

DTP46044.USERTABLE Back

USERNAME	ROLLNUMBER	EMAIL	PASSWORD
 <p>There is no data here yet</p>			

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

Back

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 Back

Export to CSV

USERNAME	ROLLNO	EMAIL	PASSWORD
PARAMESH	21	VK@gamil.com	1234
VK	23	VK@gamil.com	12034

IBM Db2 on Cloud

Data objects My script

Filter objects

DTP46044

\*Untitled - 1

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

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','12034')			0.007 s
Untitled - 1	Oct 10, 2022 12:59:55 PM	1	0.044 s

The screenshot shows the IBM Db2 on Cloud console interface. The table 'DTP46044.USERTABLE' is displayed with the following data:

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

Additional interface elements include a 'Back' button, an 'Export to CSV' button, and a sidebar with navigation options like 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'.

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 =?"
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-
Zaz09]+', 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.css"
"
    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/xicon">
-->
    <!-- <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/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; flex-direction:
column; alignitems: center;
justifycontent: center; } form
{ display: flex; flex-
direction: column; align-
items: center;
justifycontent: center;
backgroundcolor: white;
width: 40%; height:
450px; borderradius:
50px; margin:
100px; gap:
25px;

} h2 { font-size:
large; font-weight:
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 {    font-size: x-large;    padding-top: 10px;  
}
```

### Output:- registration page:-

**Register Form**

Parameshwaran

parameshvk3232@gmail.com

Enter Your Password

Register

already have an account ? please login login!

### Login Page:-

**Login Form**

Username

Parameshwaran

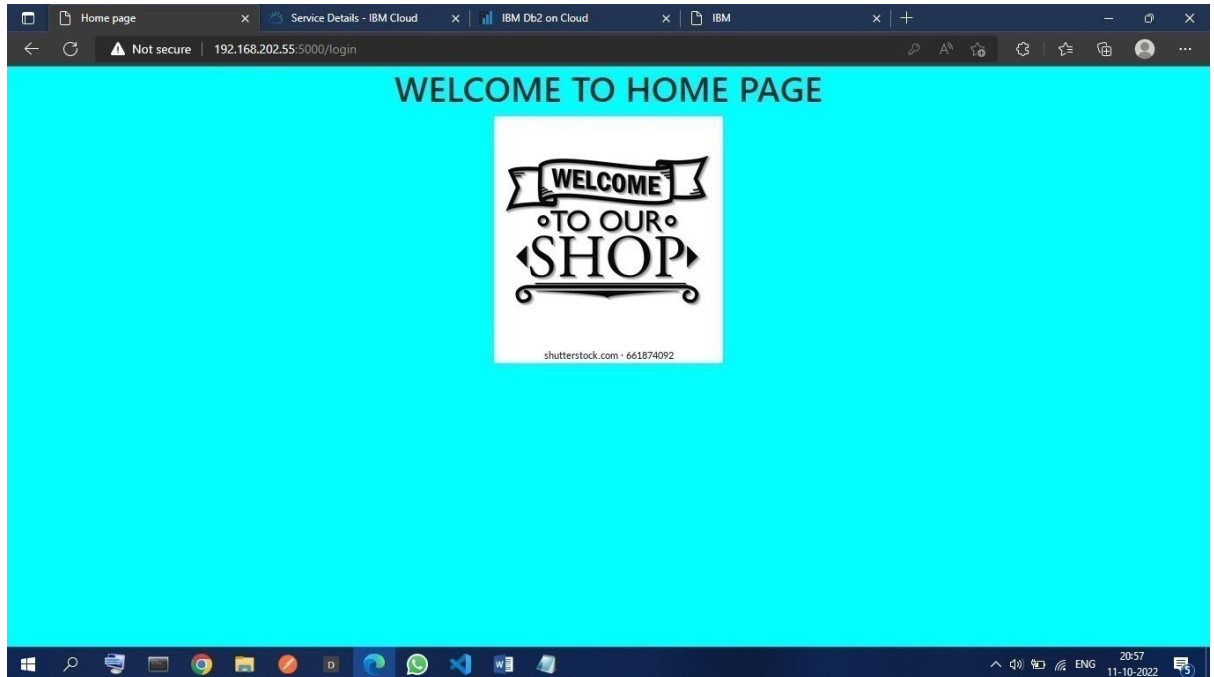
Password

\*\*\*\*\*

Login

Don't have an account yet? Click here to register!

## Welcome Page:-



## Data Base Table :-

