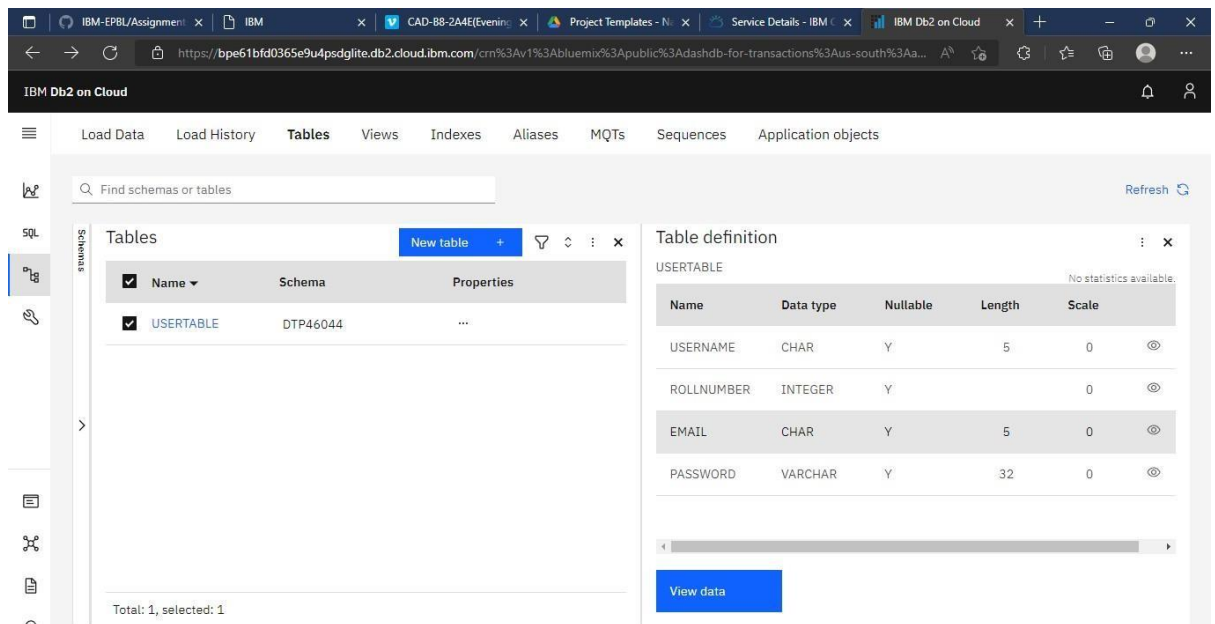


ASSIGNMENT 3

TEAM ID	PNT2022TMID27420
PROJECT NAME	SMART FASHION RECOMMENDER APPLICATION
NAME	Arivazhagan A
ROLL NO	311019205007

Questions:

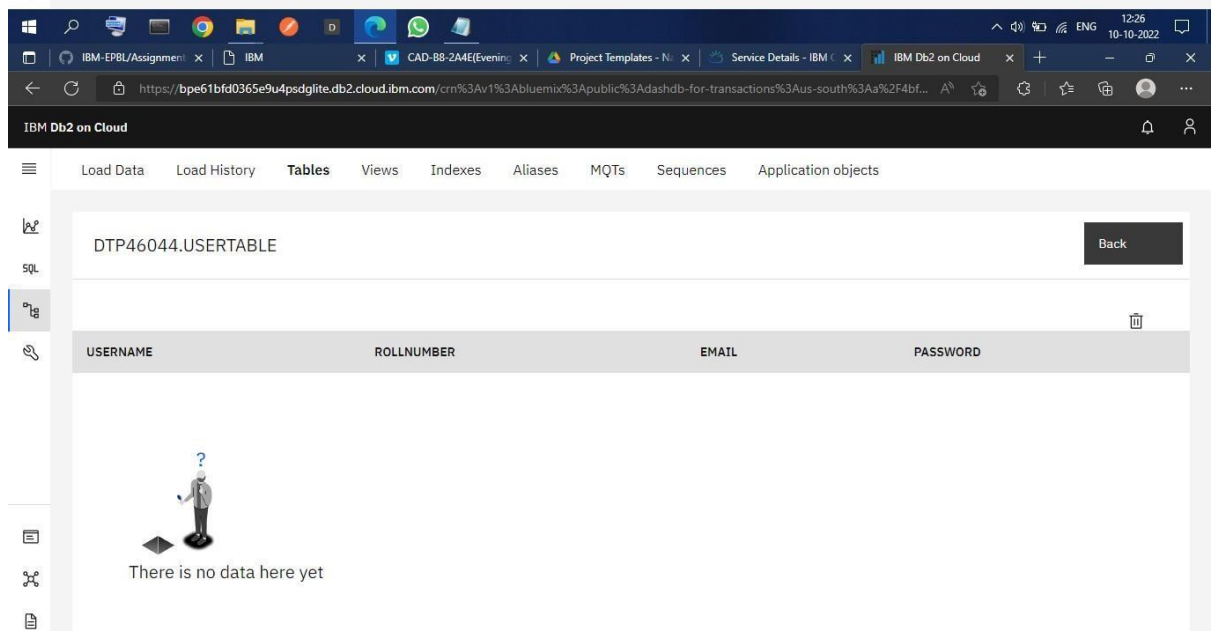
1. Create User table with user with email, username, roll number, password.



The screenshot shows the IBM Db2 on Cloud web interface. The 'Tables' tab is active, displaying a list of tables. The table 'USERTABLE' in the 'DTP46044' schema is selected. The 'Table definition' panel on the right shows the following details:

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

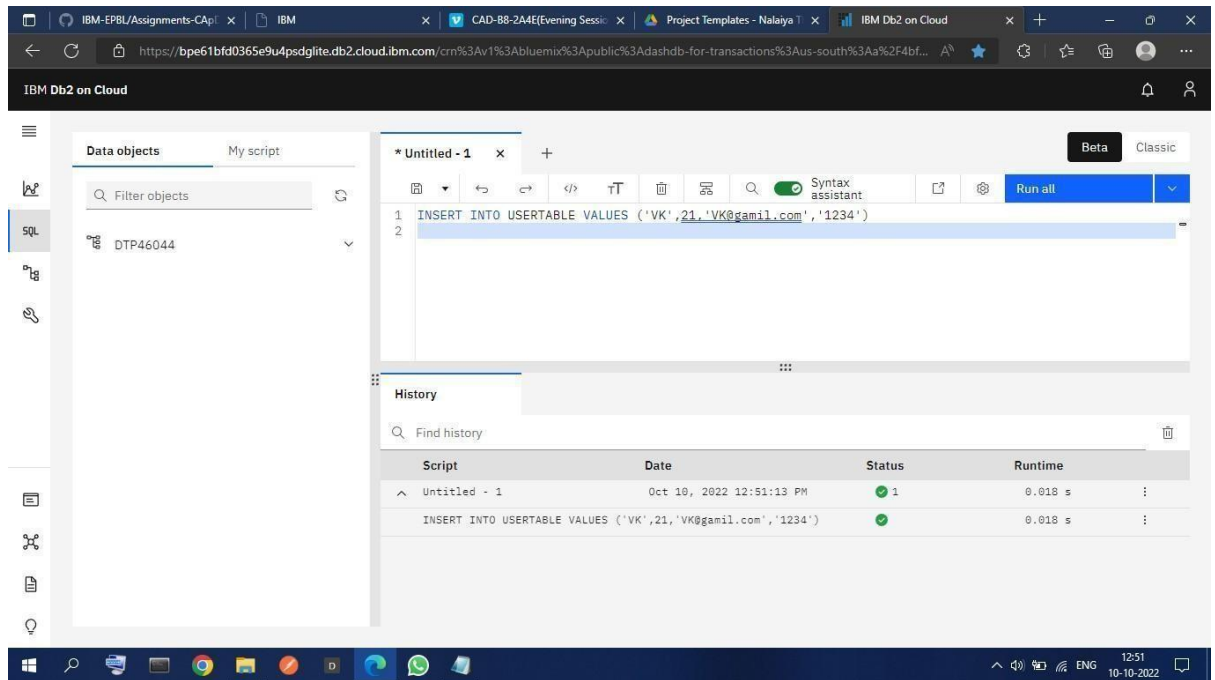
A 'View data' button is located at the bottom of the table definition panel.



The screenshot shows the IBM Db2 on Cloud web interface displaying the 'DTP46044.USERTABLE' table. The table structure is shown with the following columns: USERNAME, ROLLNUMBER, EMAIL, and PASSWORD. The table is currently empty, and a message 'There is no data here yet' is displayed with a question mark icon.

2. Perform UPDATE,DELETE Queries with user table.

UPDATE TABLE:-

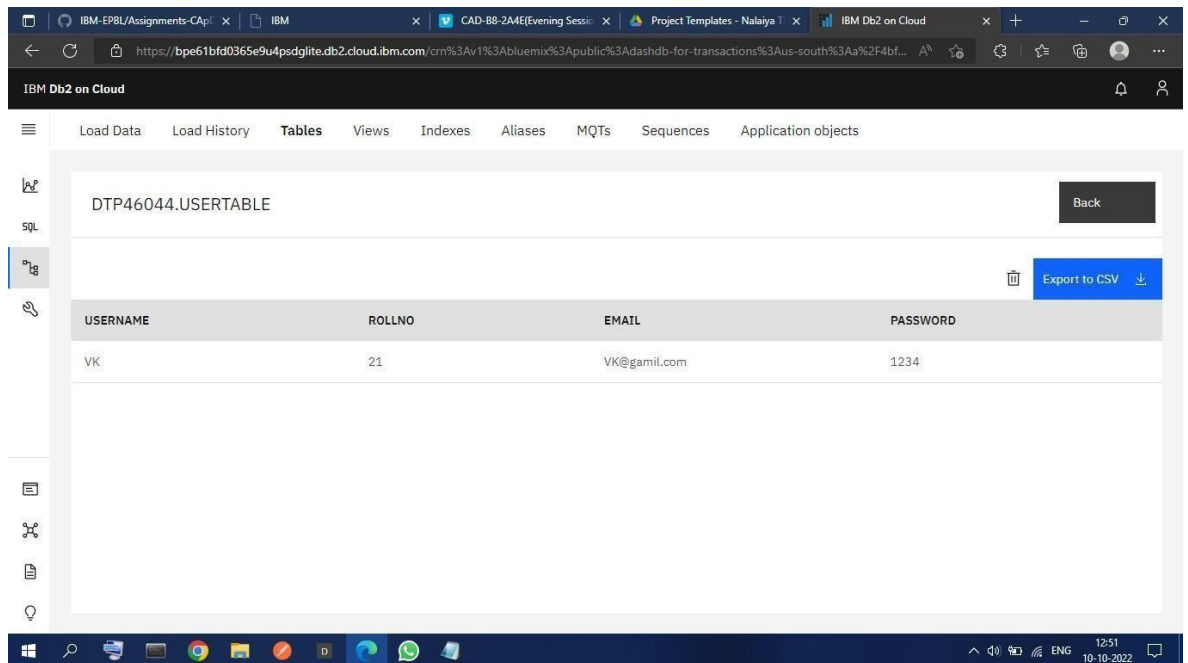


The screenshot shows the IBM Db2 on Cloud console. On the left, the 'Data objects' pane shows a database named 'DTP46044'. The main area displays a script editor with the following SQL statement:

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

The script has been executed, and the 'History' pane shows the execution details:

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



The screenshot shows the IBM Db2 on Cloud console displaying the contents of the 'DTP46044.USERTABLE' table. The table has the following columns: USERNAME, ROLLNO, EMAIL, and PASSWORD. The data is as follows:

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

DELETE TABLE:-

The screenshot shows the IBM Db2 on Cloud console 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 selected, displaying a table named DTP46044.USERTABLE. The table has four columns: USERNAME, ROLLNO, EMAIL, and PASSWORD. The data rows are as follows:

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

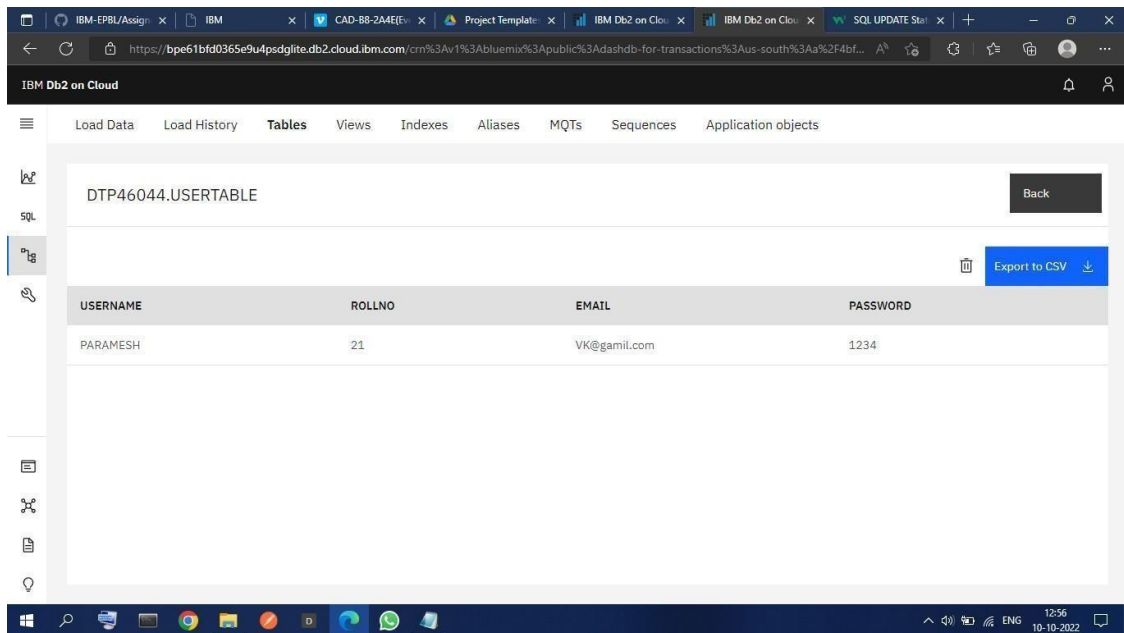
Buttons for 'Back' and 'Export to CSV' are visible in the top right corner of the table view.

The screenshot shows the IBM Db2 on Cloud console interface with the SQL editor open. The SQL statement being executed is:

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

The 'History' tab is selected, showing a list of executed scripts with their status and runtime. The history table is as follows:

Script	Date	Status	Runtime
Untitled - 1	Oct 10, 2022 1:02:49 PM	1	0.006 s
DELETE FROM USERTABLE WHERE ROLLNO = 23		1	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')		1	0.007 s
Untitled - 1	Oct 10, 2022 12:59:55 PM	1	0.044 s



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=dtp46044;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-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.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/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/font-
awesome/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:-

login!'. The browser tabs show 'Smart Fashion register', 'Service Details - IBM Cloud', 'IBM Db2 on Cloud', and 'IBM'. The address bar shows '192.168.202.55:5000'."/>

Register Form

Parameshwaran

parameshvk3232@gmail.com

Enter Your Password

[Register](#)

already have an account ? please login [login!](#)

Login Page:-

register!'. The browser tabs show 'Smart Fashion Login', 'Service Details - IBM Cloud', 'IBM Db2 on Cloud', and 'IBM'. The address bar shows '192.168.202.55:5000/login'."/>

Login Form

Username

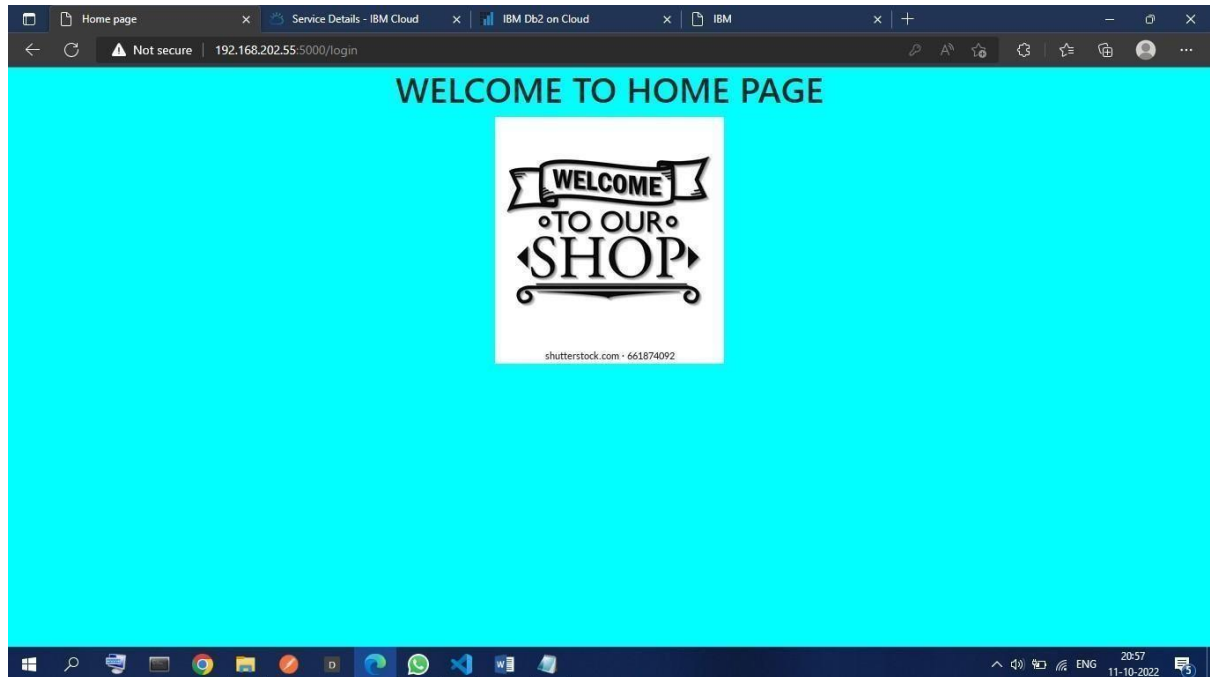
Parameshwaran

Password

[Login](#)

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

Welcome Page:-



Data Base Table :-

