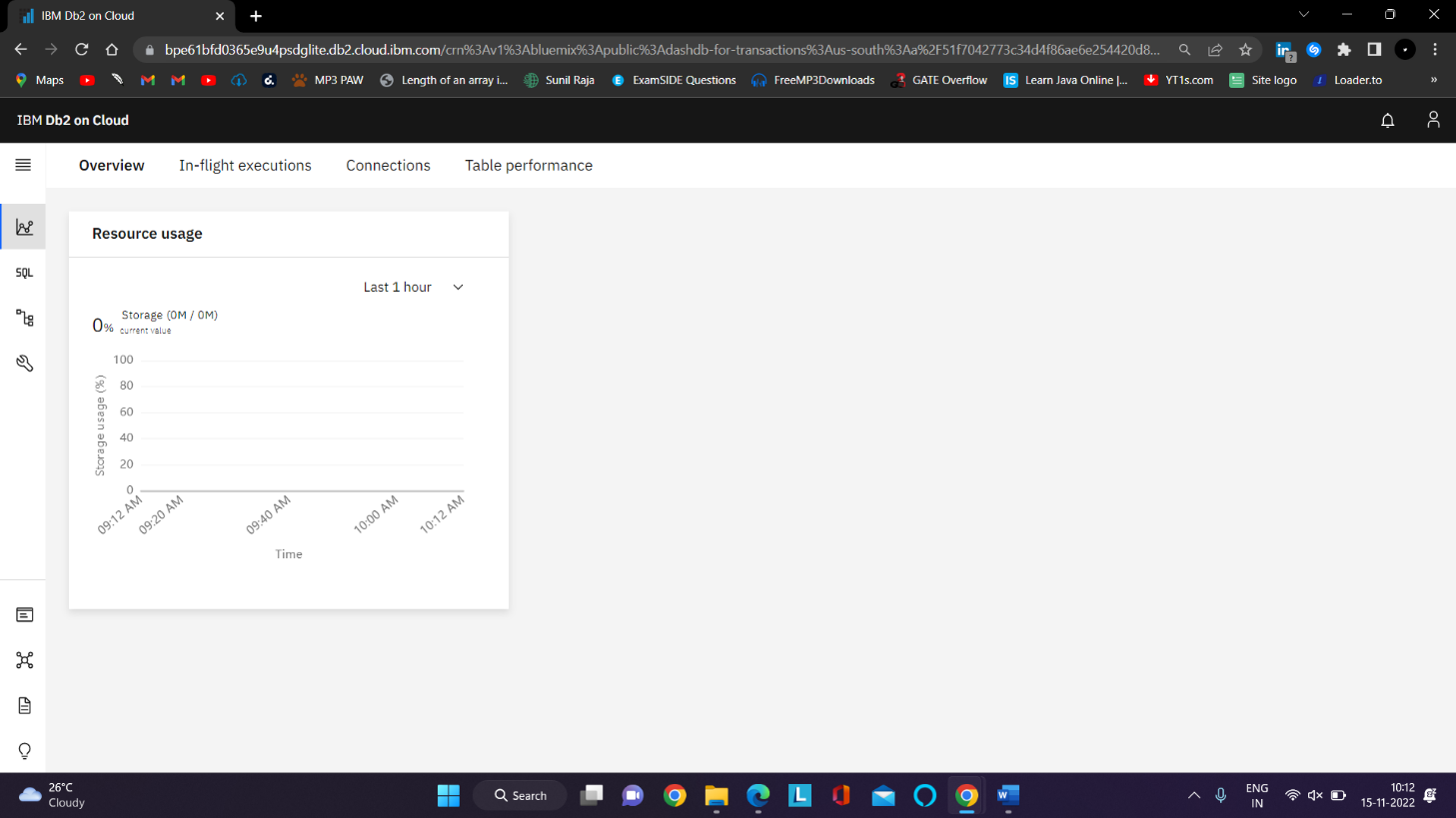
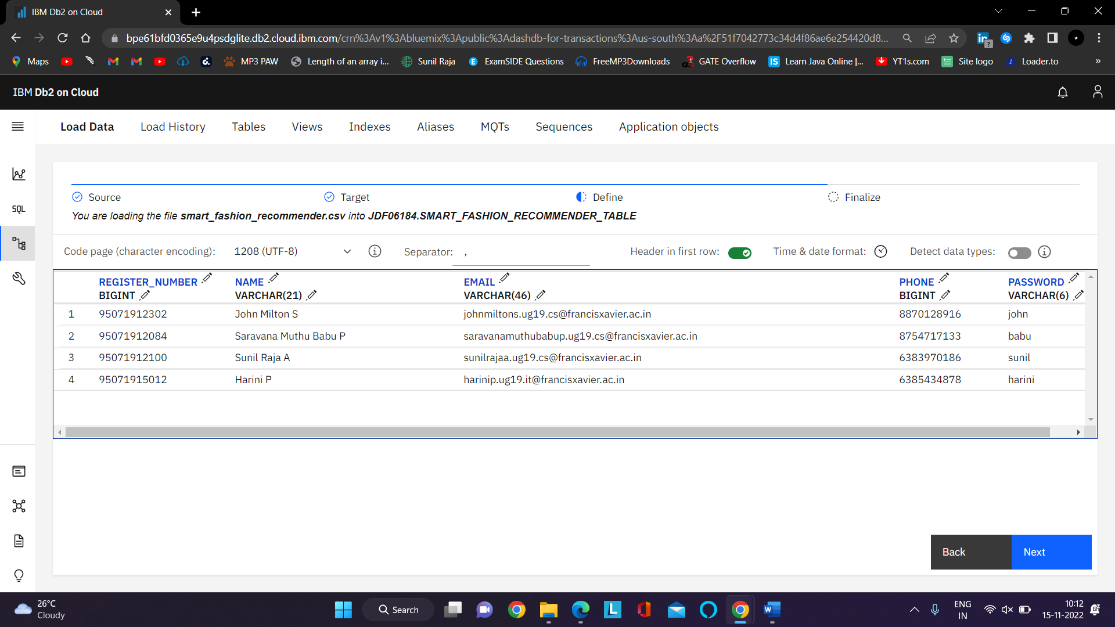
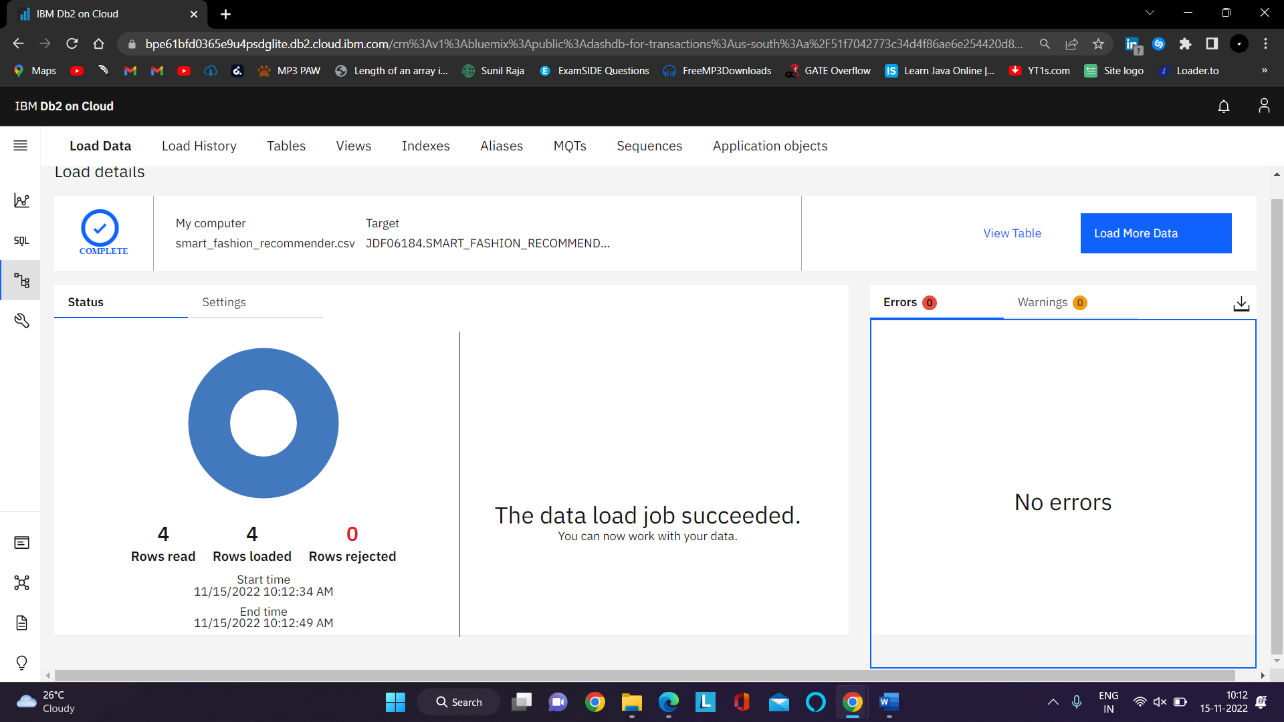
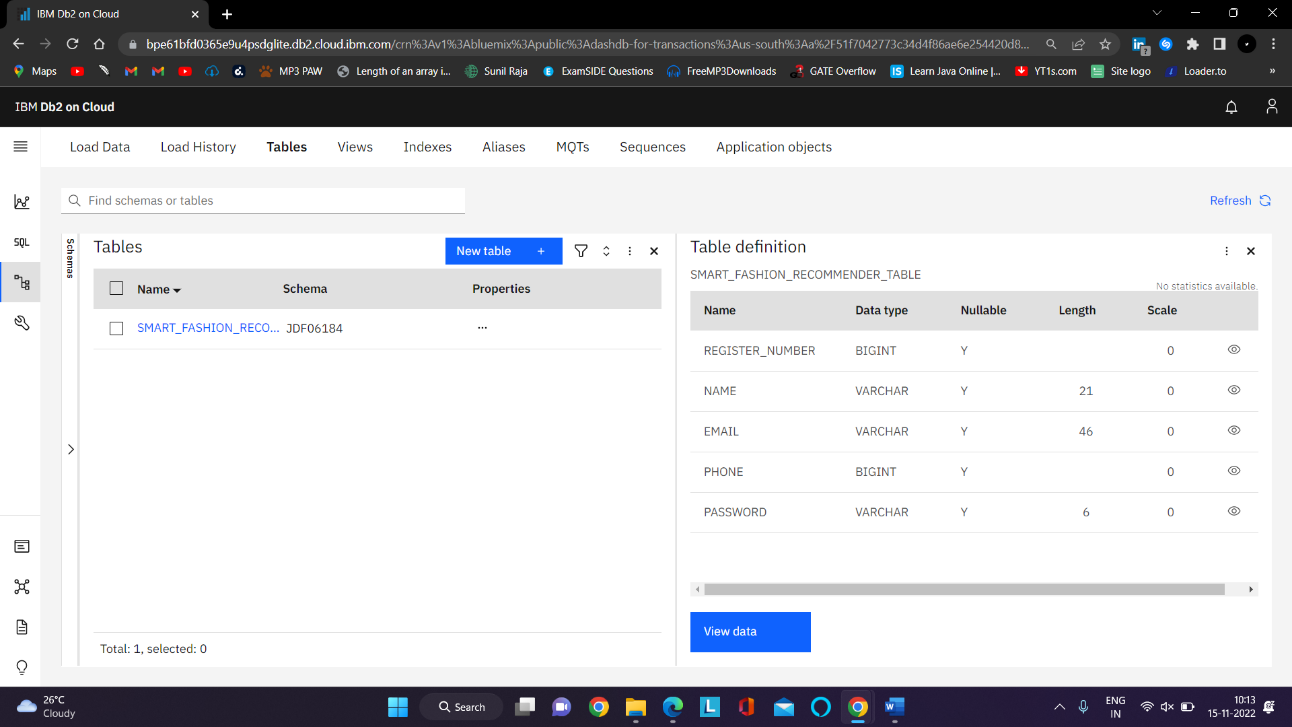
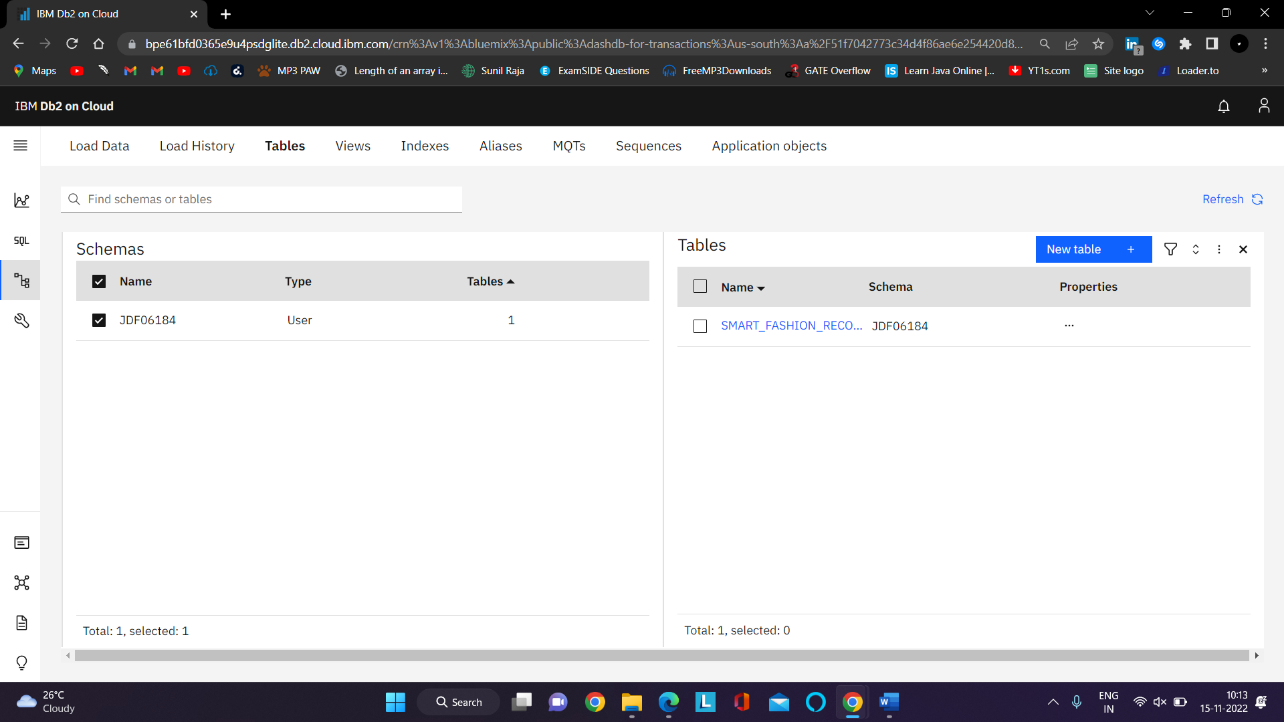
**Assignment -2**

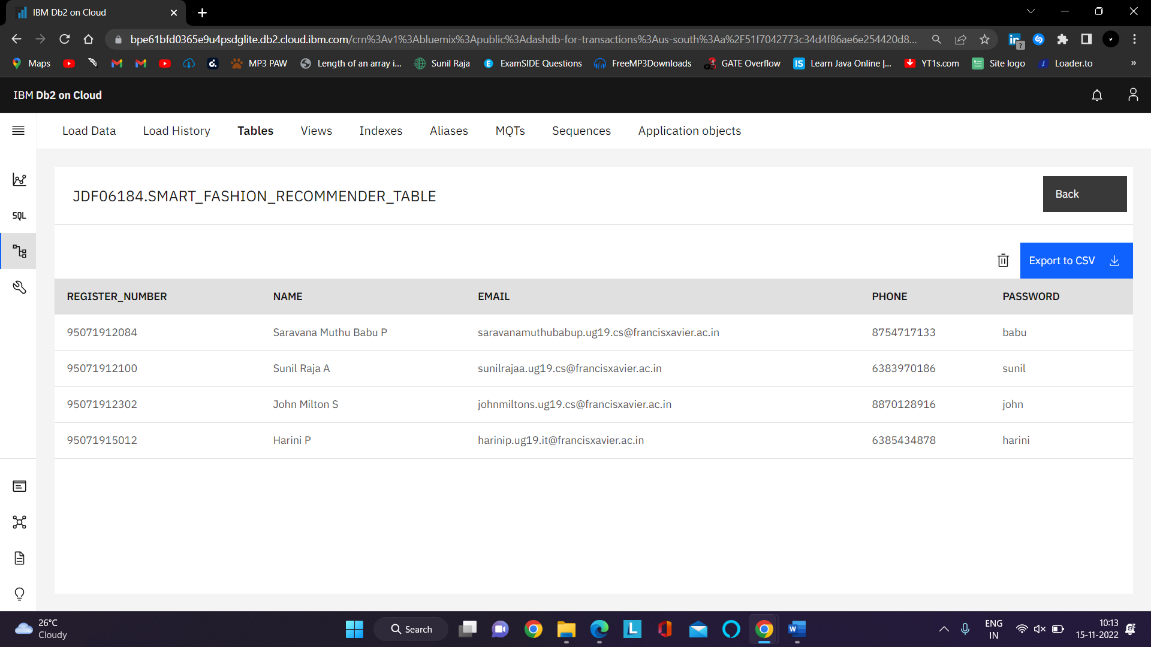
IBM CLOUD DB2

|  |  |
| --- | --- |
| Assignment Date | 29 September 2022 |
| Team ID | PNT2022TMID53909 |
| Student Name | Saravana Muthu Babu P |
| Student Roll Number | 95071912084 |
| Maximum Marks | 2 Marks |

**Questions:**

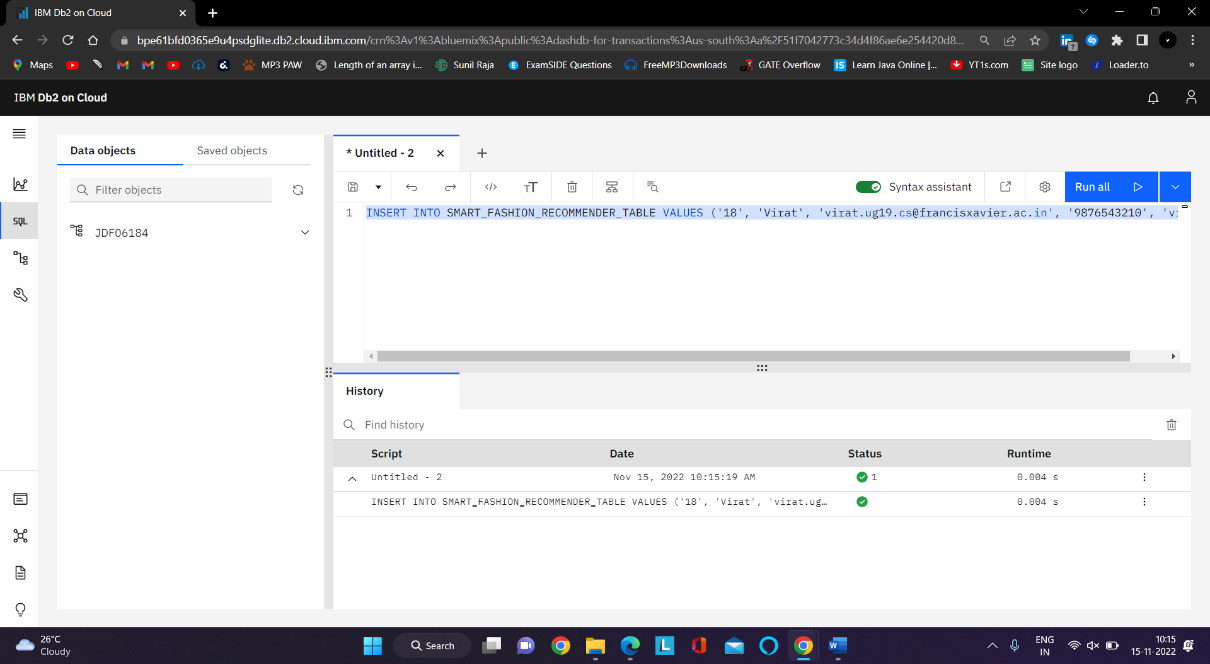
1. Create User table with user with email, username, roll number, password.

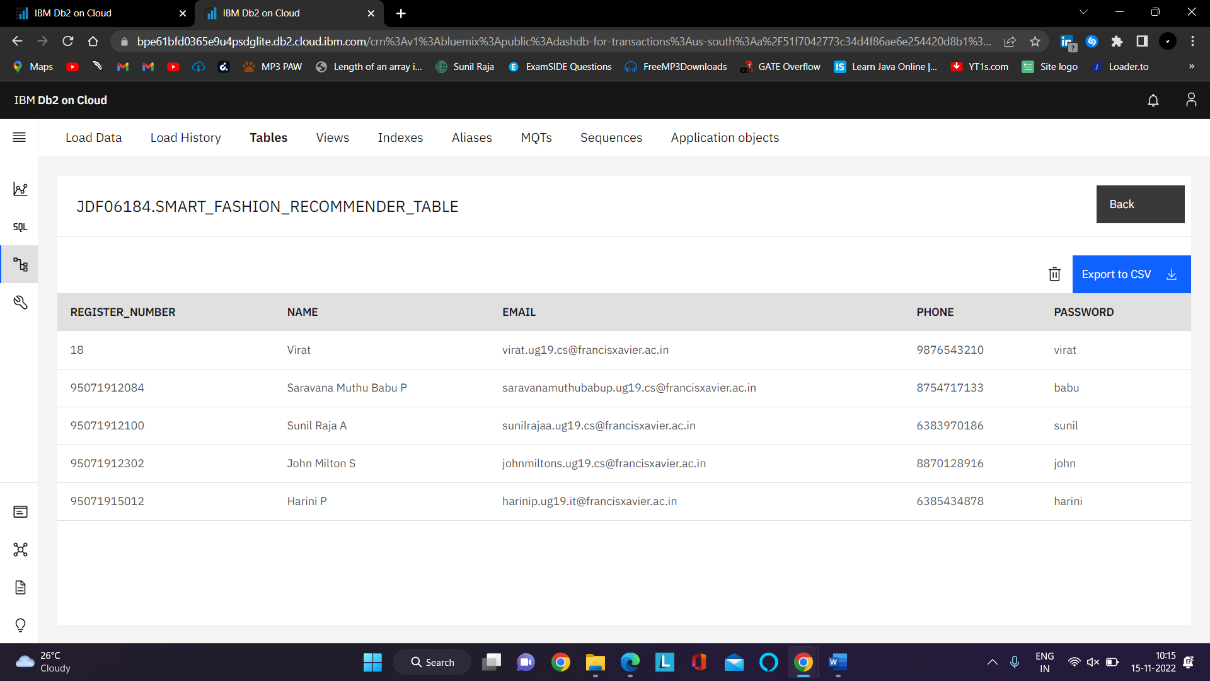


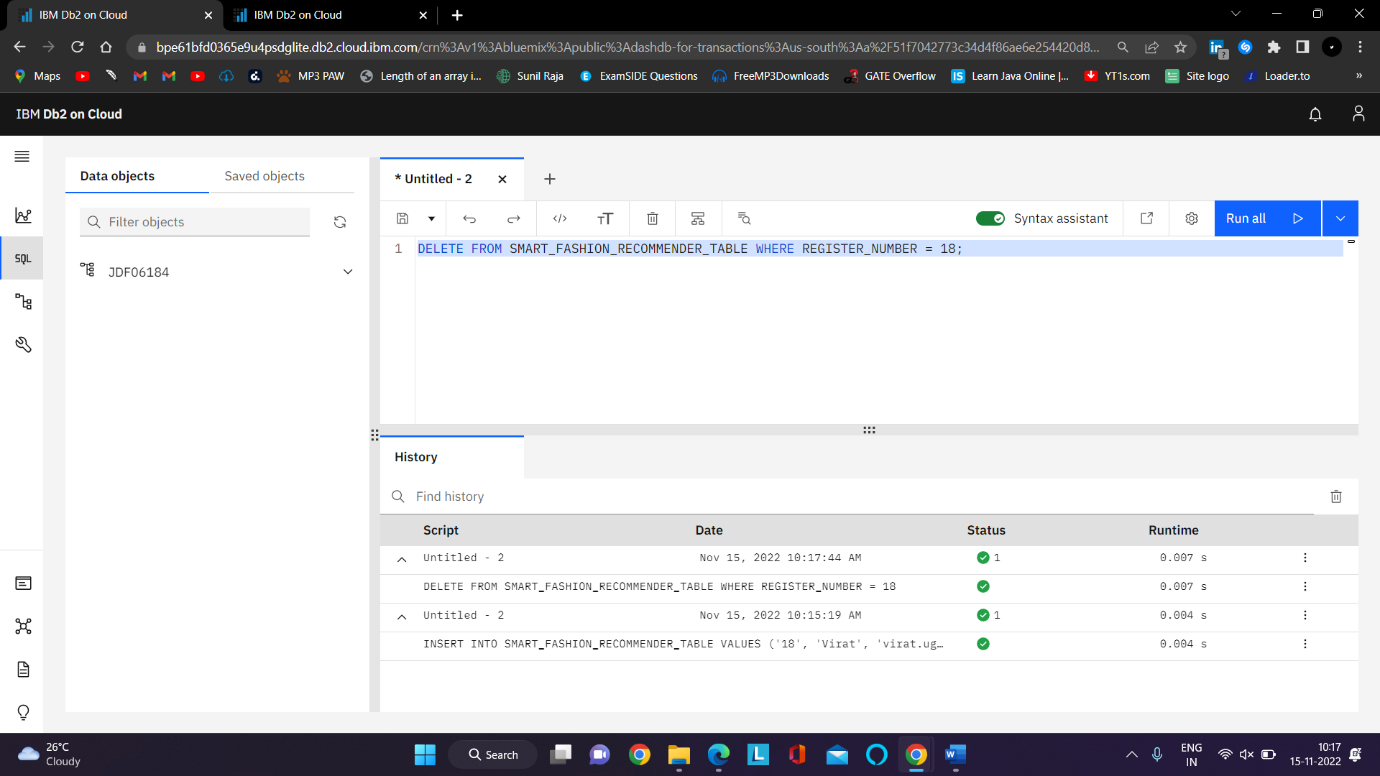


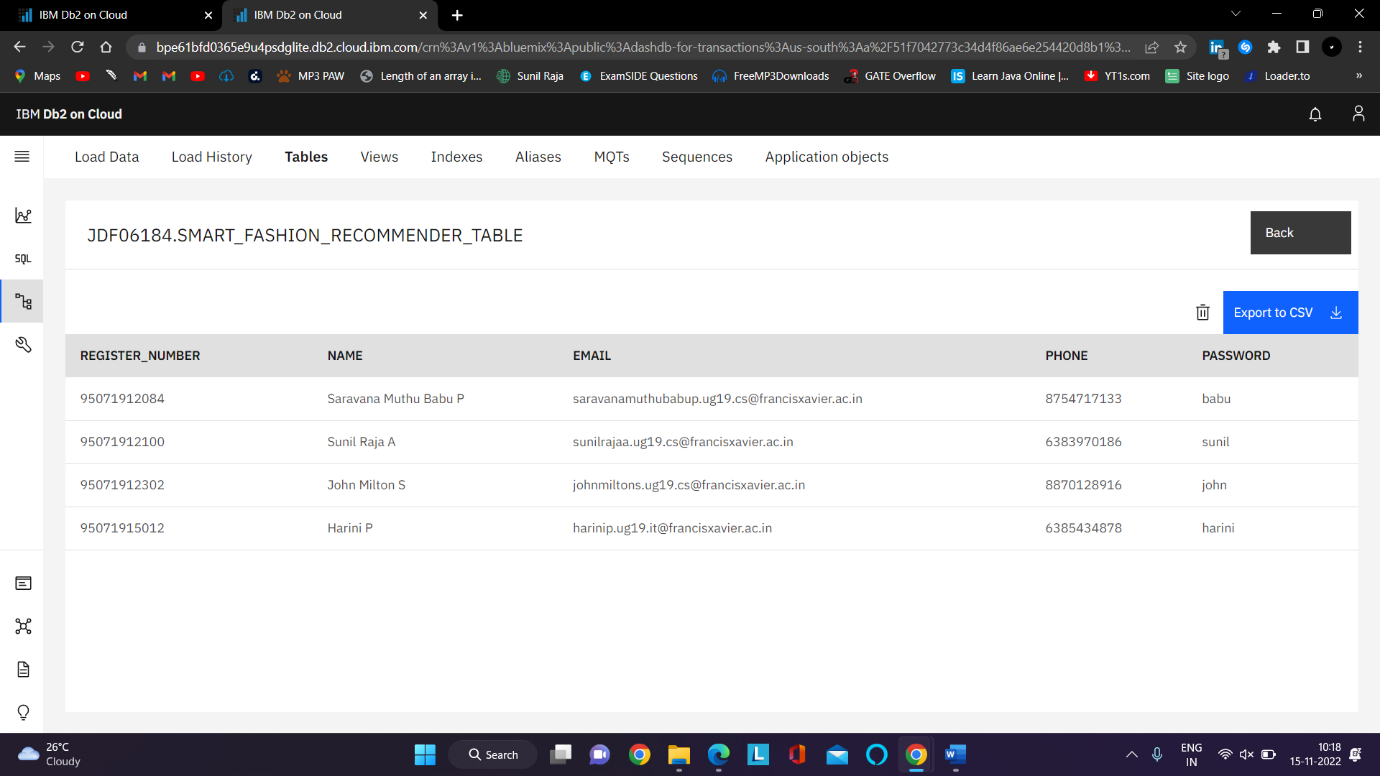
1. Perform UPDATE,DELETE Queries with user table.

**UPDATE TABLE:-**

****



**DELETE TABLE:**

****

1. 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=ba99a9e6-d59e-4883-8fc0-d6a8c9f7a08f.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=31321;USERNAME=jdf06184;PASSWORD=vmxvhG6ebxrzRw0c;SECURITY=SSL;SSLSERVERCERTIFICATE=DigiCertGlobalRootCA.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(prep\_stmt, 1, username)

            ibm\_db.bind\_param(prep\_stmt, 2, email)

            ibm\_db.bind\_param(prep\_stmt, 3, password)

            ibm\_db.execute(prep\_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* {

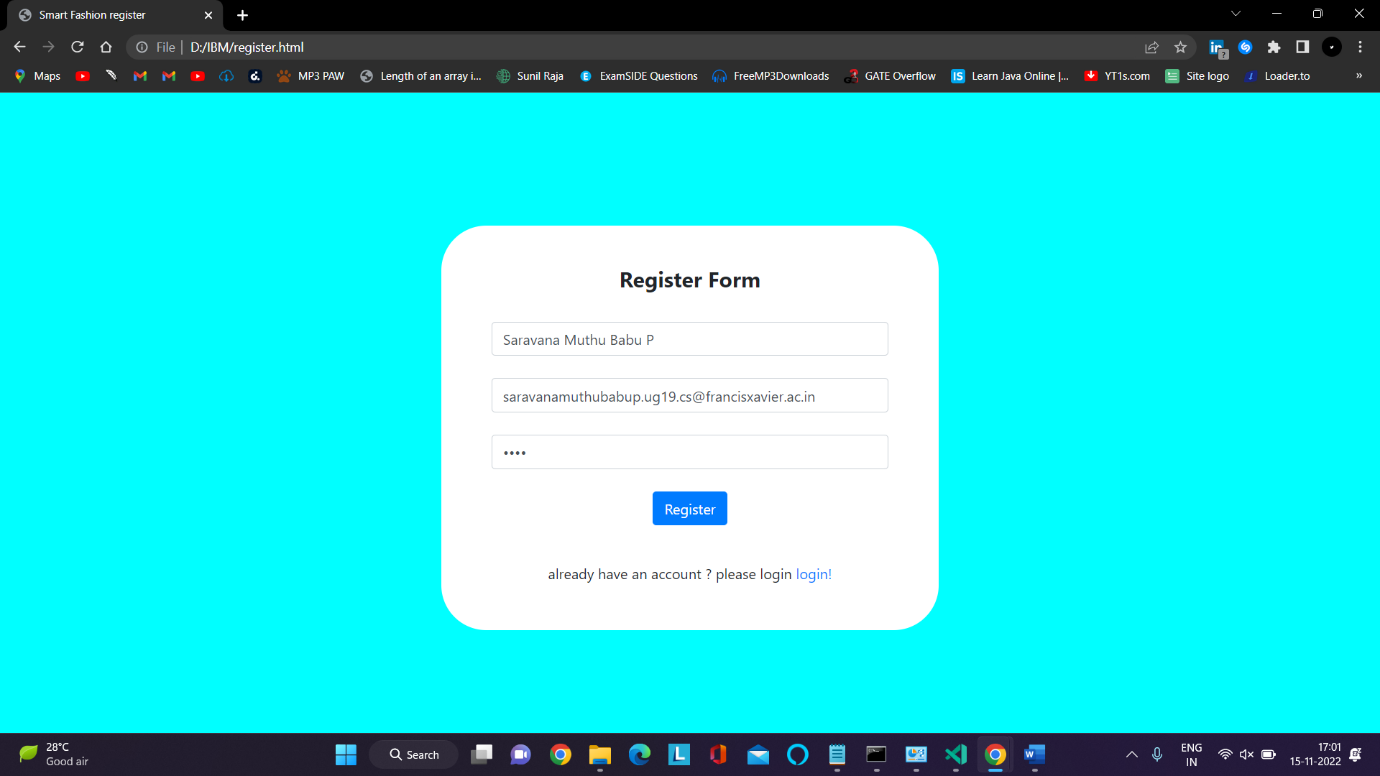
    font-size: x-large;

    padding-top: 10px;

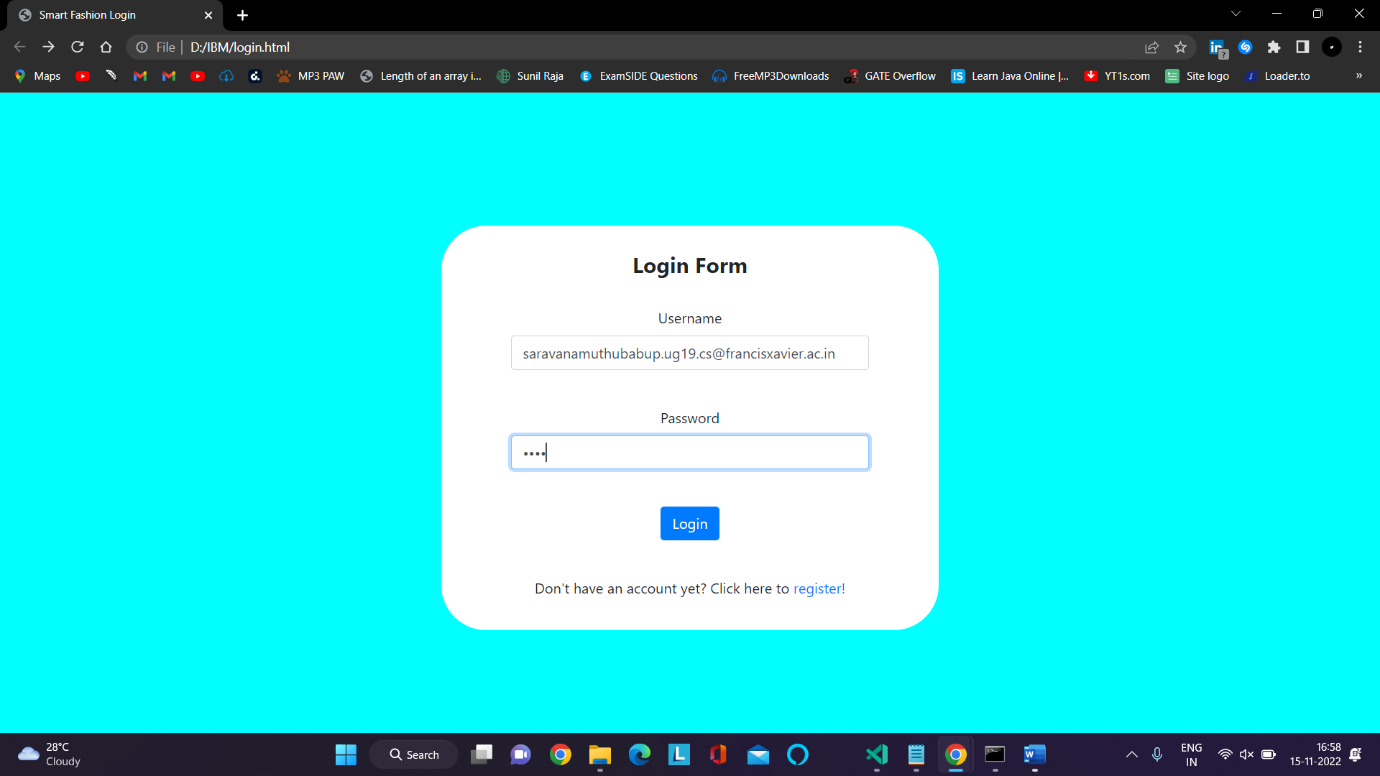
}

**Output:**

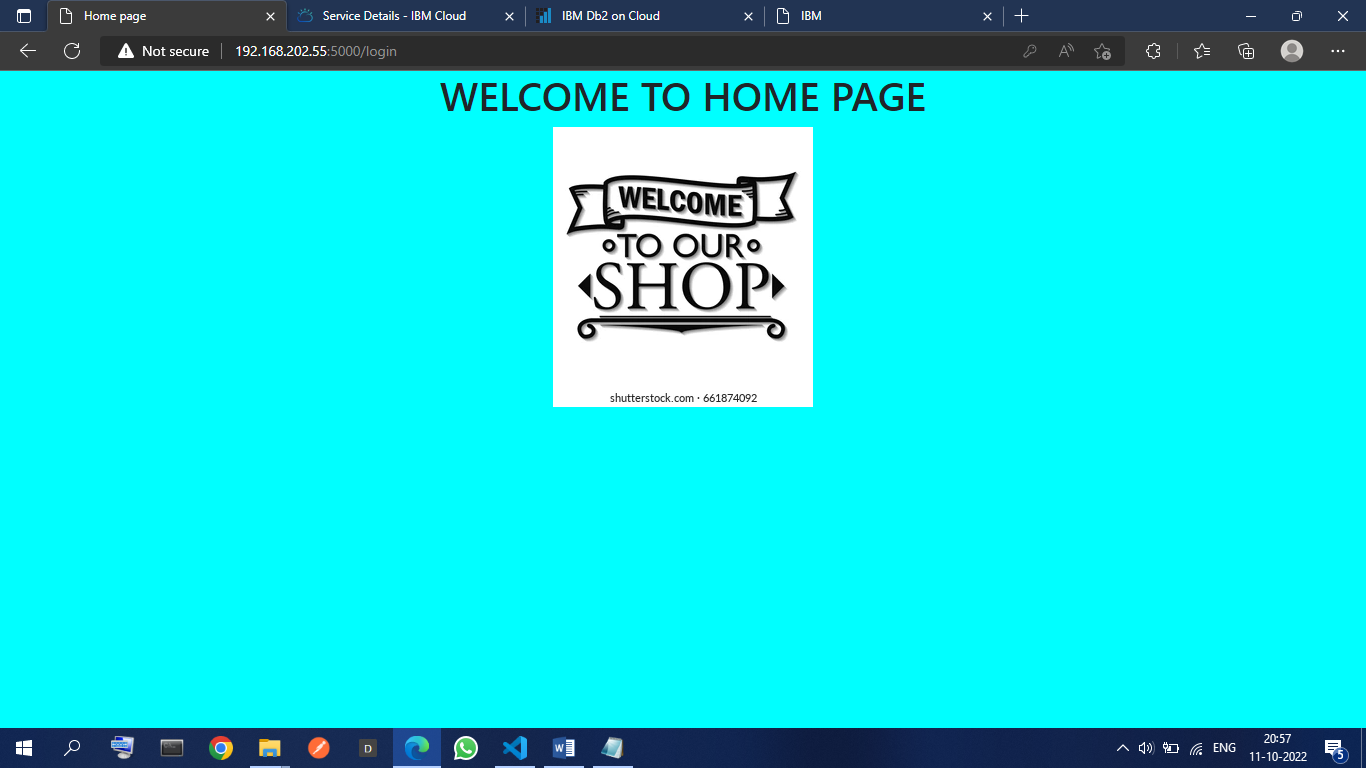
**registration page:**

****

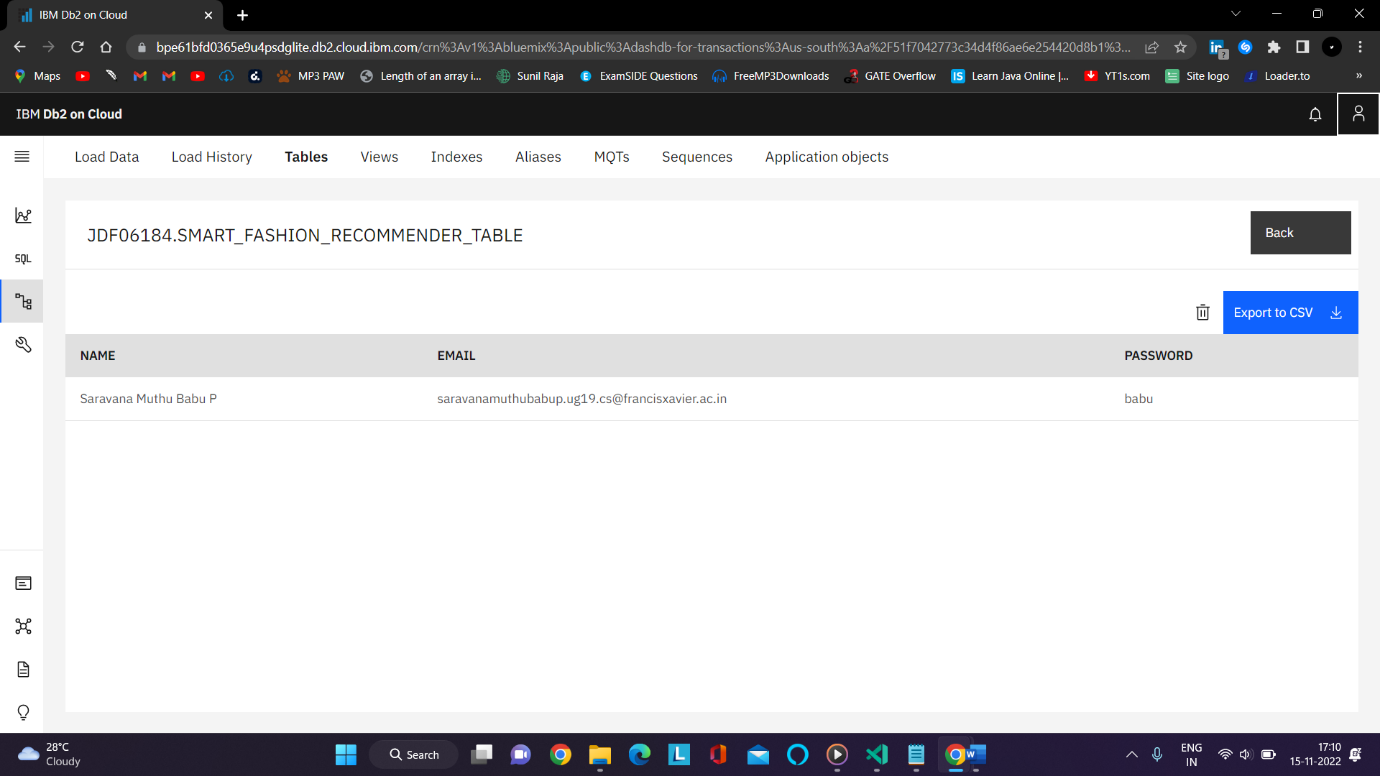
**Login Page:**

****

**Welcome Page:**



**Data Base Table:**

****