

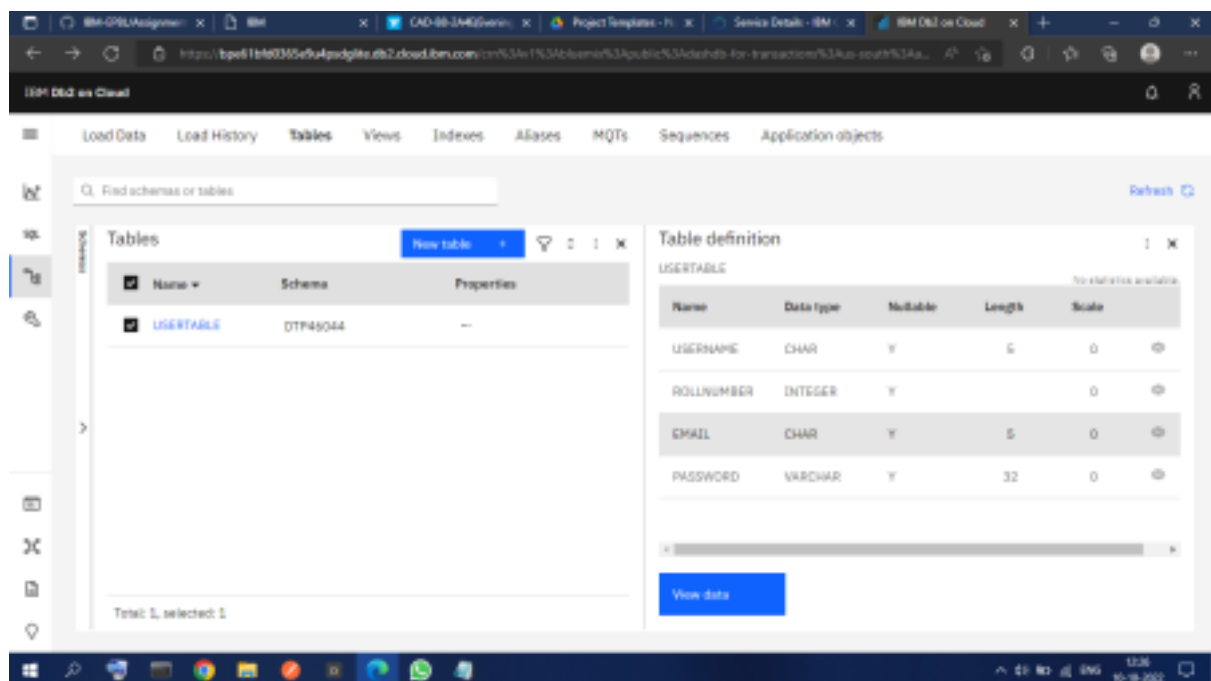
Assignment -2

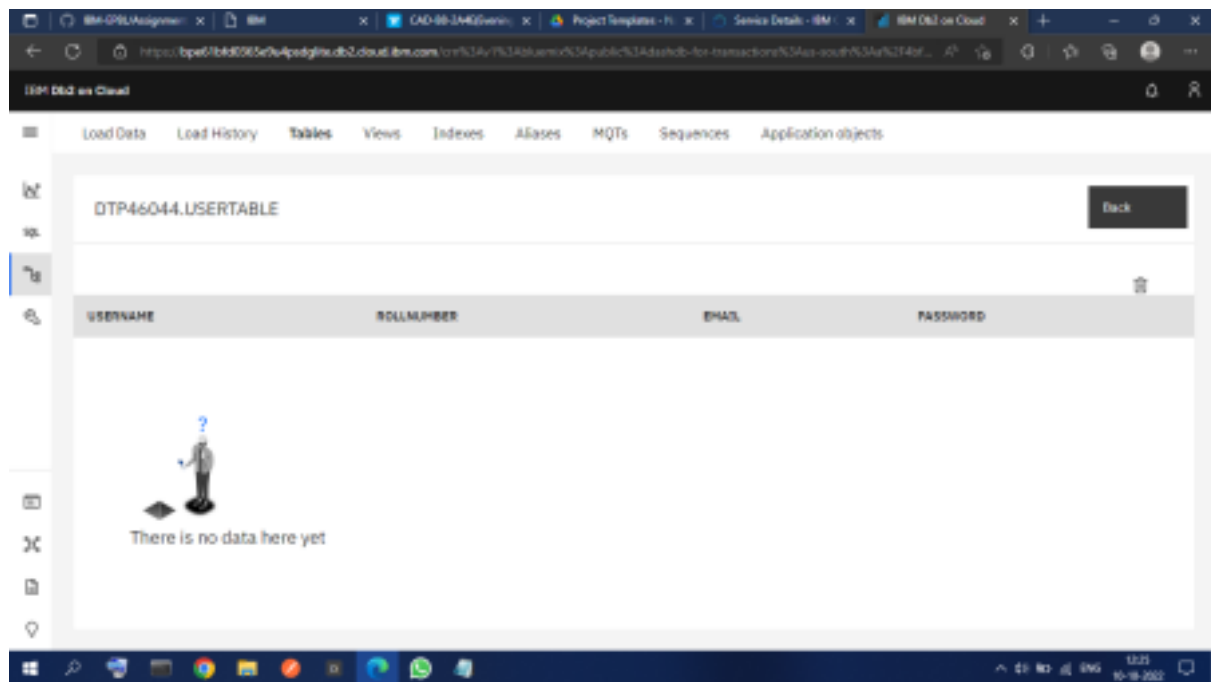
IBM CLOUD DB2

Assignment Date	10 november 2022
Student Name	HEMALATHA S
Student Roll Number	821019104016
Maximum Marks	2 Marks

Questions:

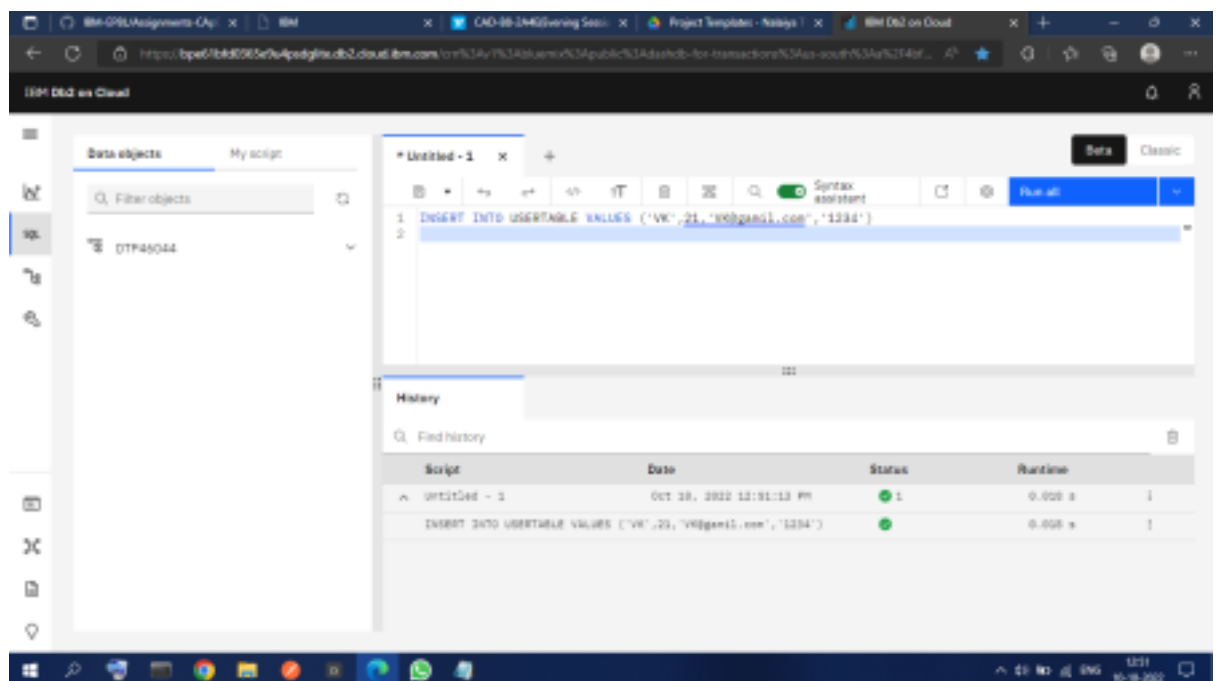
1. Create User table with user with email, username, roll number, password.





2. Perform UPDATE,DELETE Queries with user table.

UPDATE TABLE:-



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
VR	21	VR@gmail.com	1234

DELETE TABLE:-

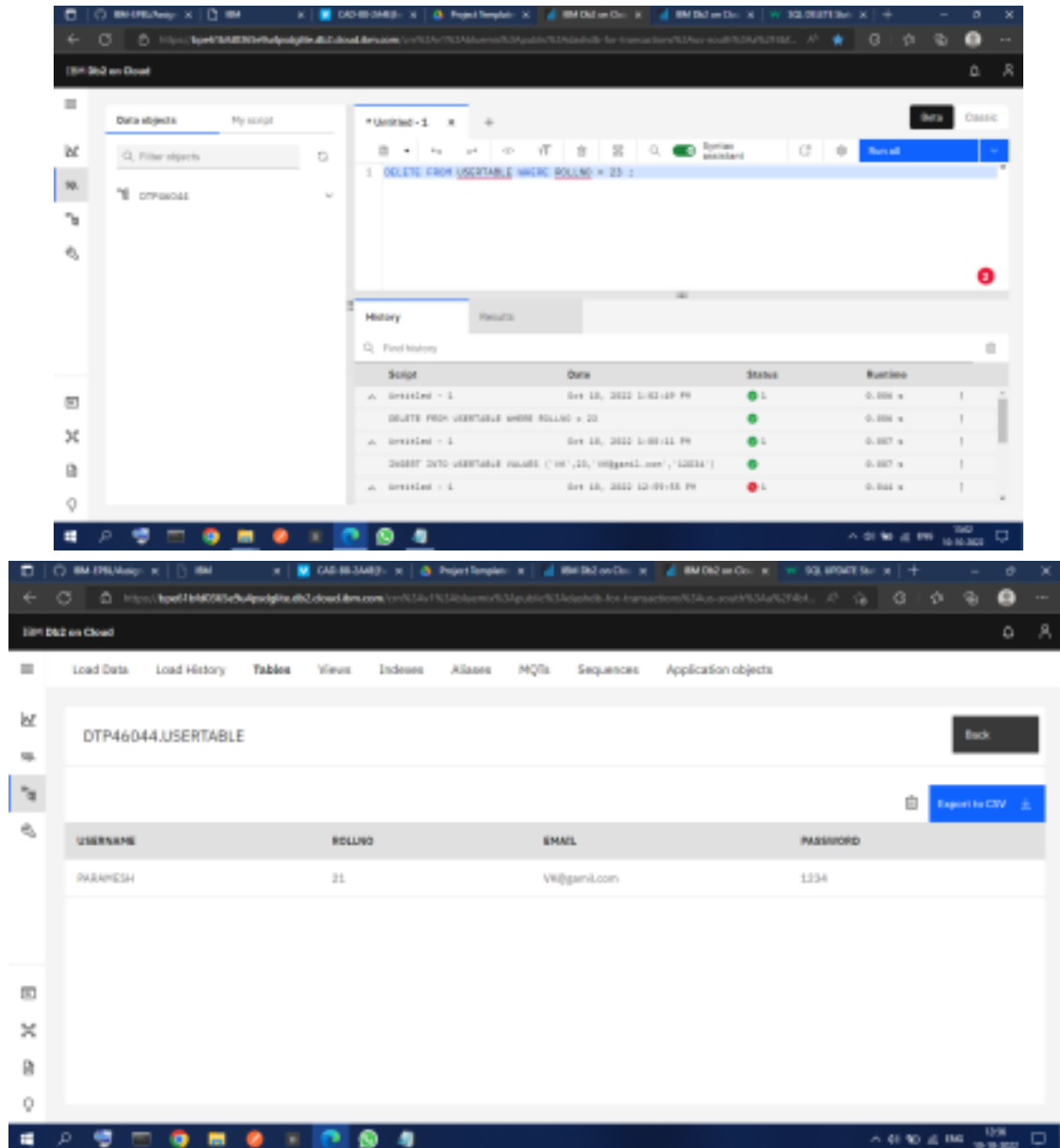
IBM Db2 on Cloud

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

DTP46044.USERTABLE Back

Export to CSV

USERNAME	ROLLNO	EMAIL	PASSWORD
PARAMSR	21	VR@gmail.com	1234
VR	25	VR@gmail.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;USERNA
```

```
M
```

```
E=dtP46044;PASSWORD=95soX0sZGhb4ToUj;SECURITY=SSL;SSLSERVERCERTIFICATE=DigiCe
```

```
r 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.cs
s "
        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.cs
s "
  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 Windows taskbar at the bottom shows various application icons and the system clock displaying '2021 11-18-2022'."/>

Smart Fashion register | Service Details - IBM Cloud | IBM Db2 on-Cloud | IBM

Not secure | 192.168.202.55:3000

Register Form

Parameshwaran

parameshw3232@gmail.com

Enter Your Password

Register

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

2021 11-18-2022

Login Page:-

register!'. The Windows taskbar at the bottom shows various application icons and the system clock displaying '2021 11-18-2022'."/>

Smart Fashion login | Service Details - IBM Cloud | IBM Db2 on-Cloud | IBM

Not secure | 192.168.202.55:3000/login

Login Form

Username

Parameshwaran

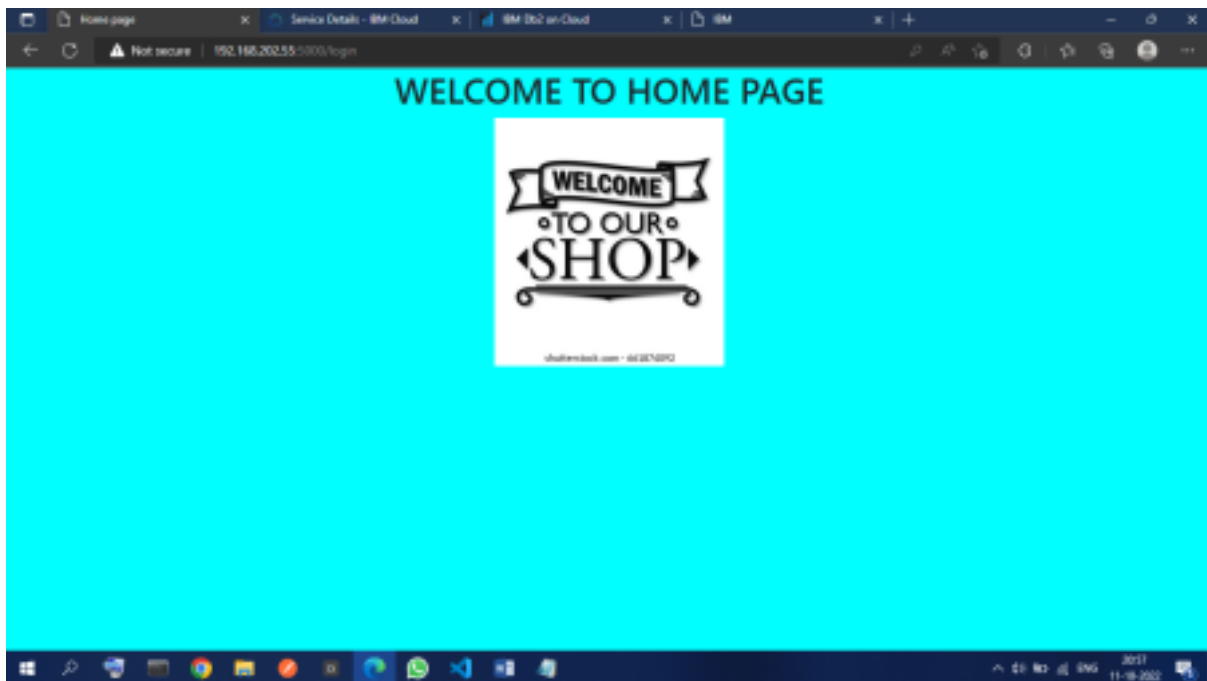
Password

Login

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

2021 11-18-2022

Welcome Page:-



Data Base Table :-

