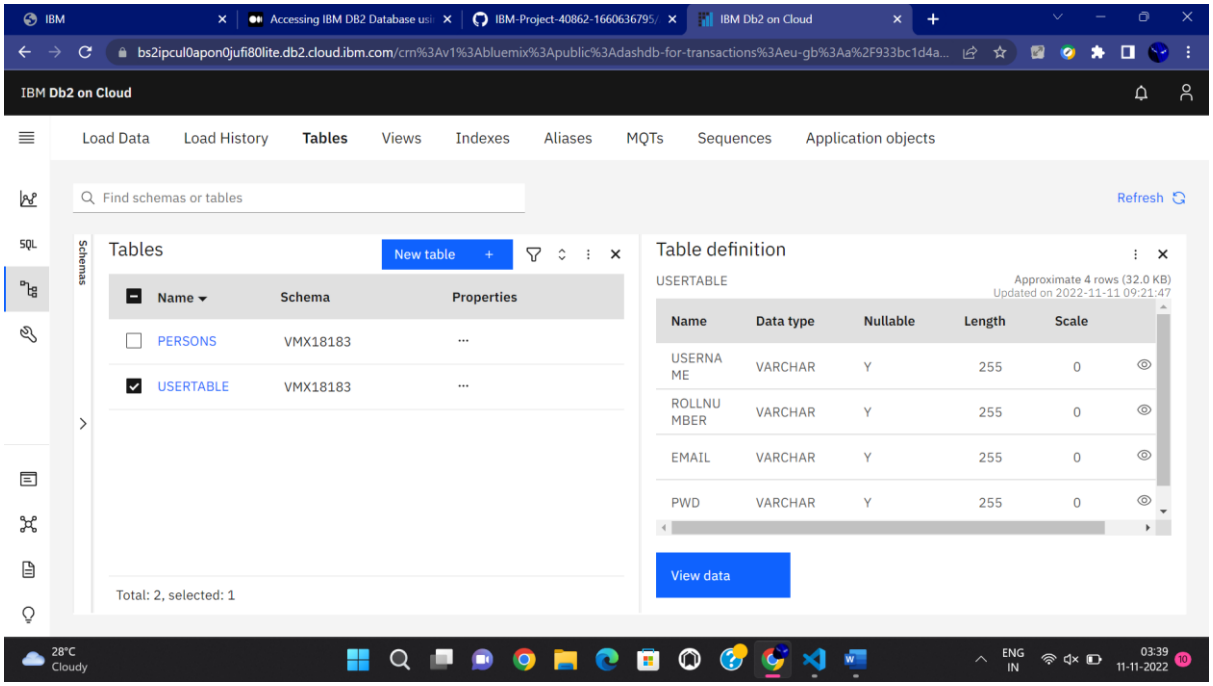
**Assignment -2**

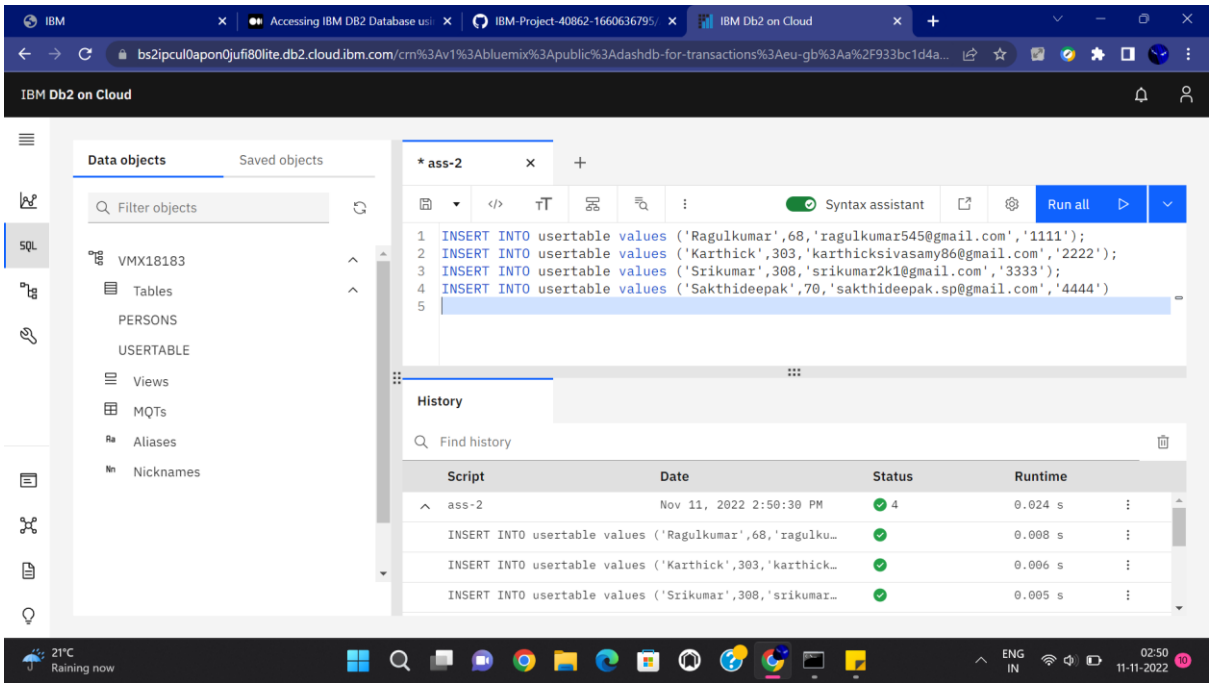
IBM CLOUD DB2

| | |
|---|---|
| Assignment Date | 29 September 2022 |
| Team Member | Sakthideepak.P |
| Student Roll Number | 721719104070 |
| Maximum Marks | 2 Marks |

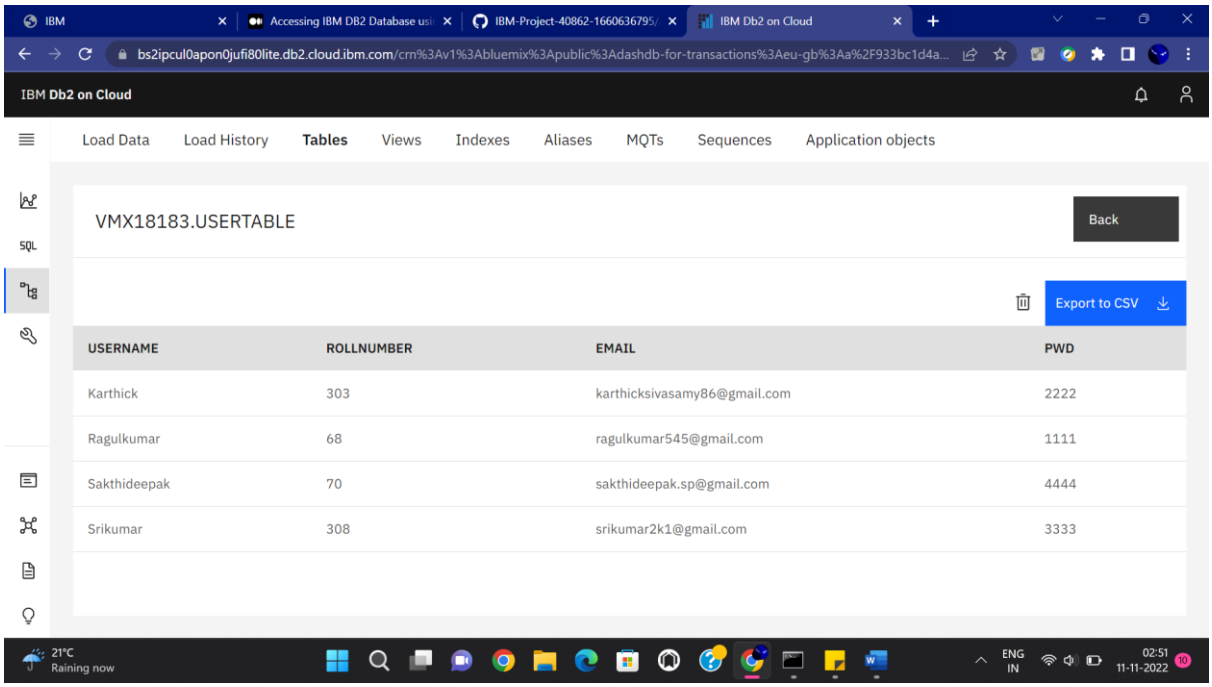
**Questions:**




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



2. Perform UPDATE,DELETE Queries with user table.




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=DigiC
ertGlobalRootCA.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>
```

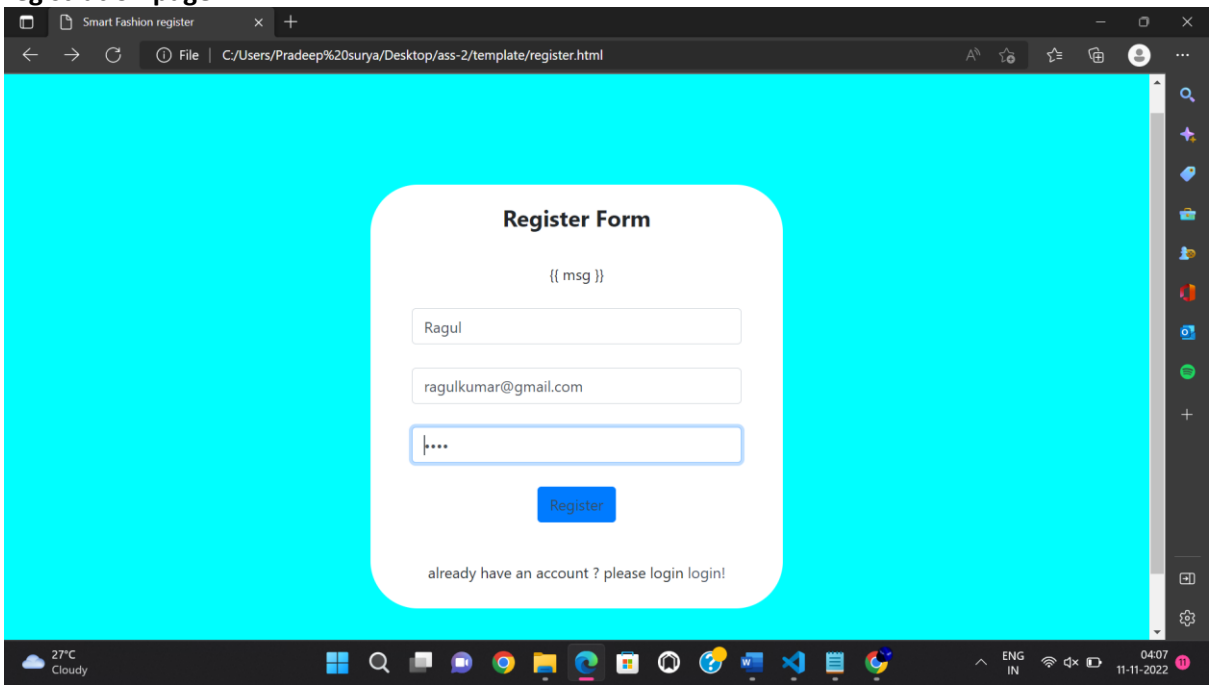
Style.css

```
  * {
    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;
```

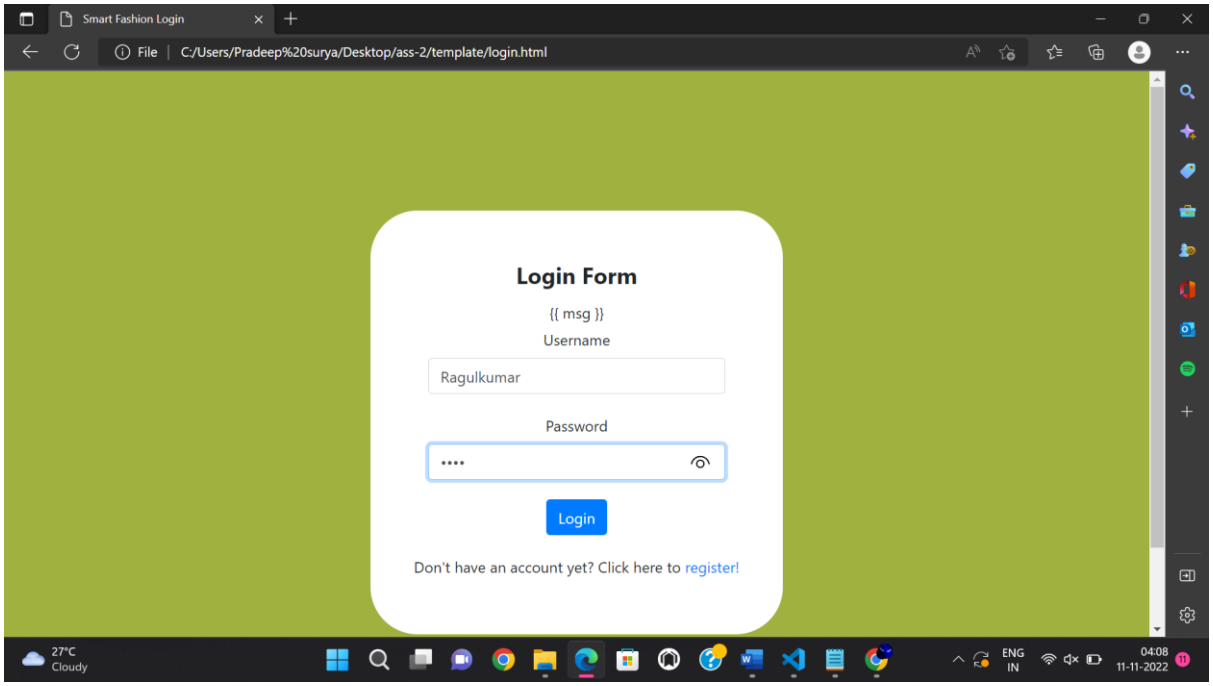
```
        flex-direction: column;
        width: 90%;
    }

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

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

**Output:-**

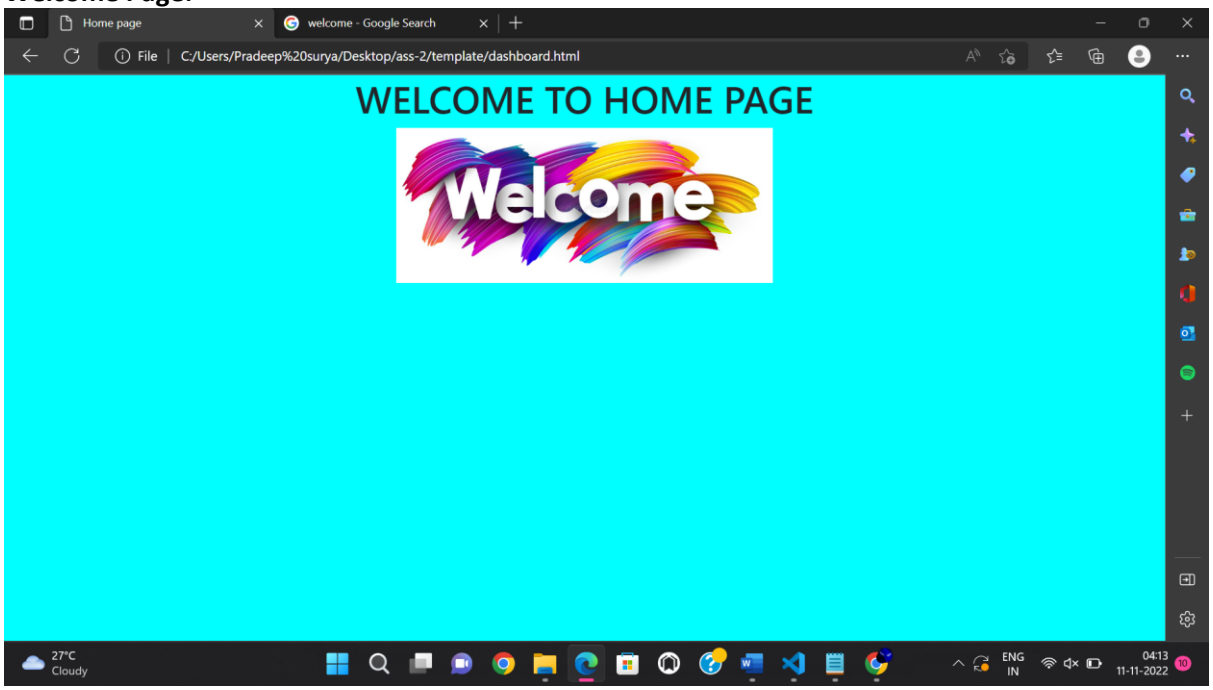
**registration page:-**



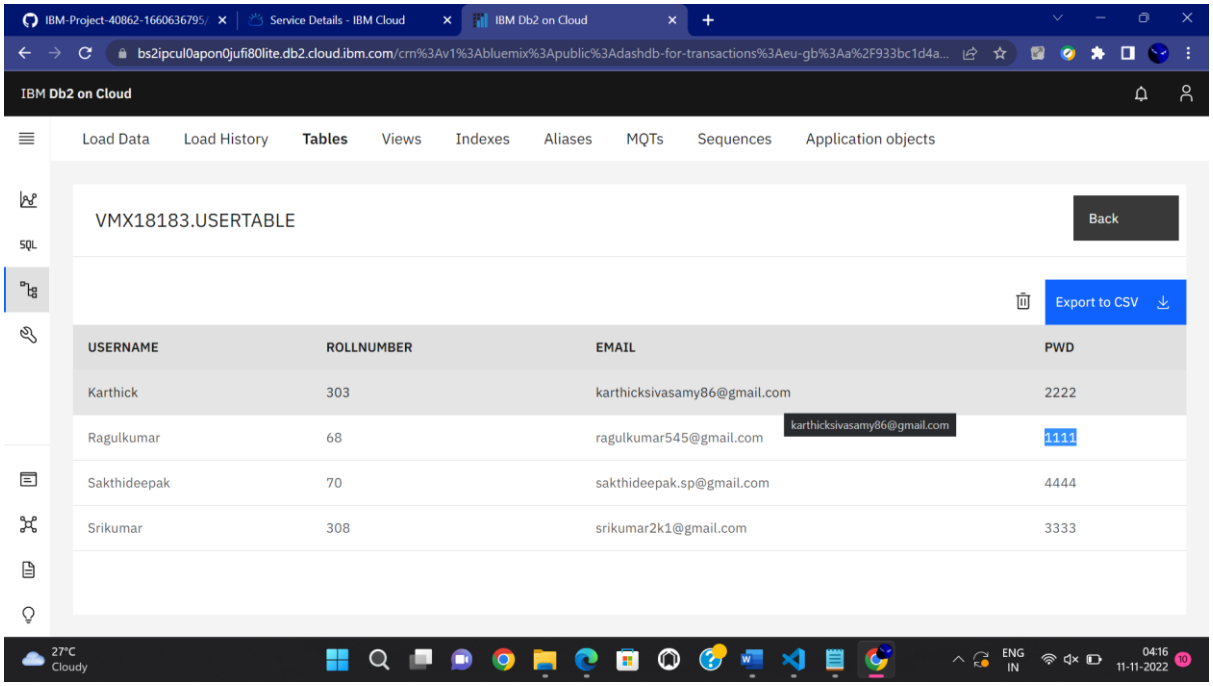

**Login Page:-**




**Welcome Page:-**




**Data Base Table :-**


IBM-Project-40862-1660636795/
Service Details - IBM Cloud
IBM Db2 on Cloud
bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aeu-gb%3Aa%2F933bc1d4a...
IBM Db2 on Cloud
Load Data
Load History
Tables
Views
Indexes
Aliases
MQTs
Sequences
Application objects
SQL
VMX18183.USERTABLE
Back
Export to CSV
USERNAME
ROLLNUMBER
EMAIL
PWD
Karthick
303
karthicksivasamy86@gmail.com
2222
Ragulkumar
68
ragulkumar545@gmail.com
karthicksivasamy86@gmail.com
1111
Sakthideepak
70
sakthideepak.sp@gmail.com
4444
Srikumar
308
srikumar2k1@gmail.com
3333
27°C
Cloudy
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11-11-2022