

### ASSIGNMENT 3

TEAM ID	PNT2022TMID27406
PROJECT NAME	NEWS TRACKER APPLICATION
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#### Questions:

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

The screenshot displays the IBM Db2 on Cloud web interface. The browser address bar shows the URL: `bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions...`. The interface includes a top navigation bar with tabs for 'Service Details - IBM Cloud' and 'IBM Db2 on Cloud'. Below this is a search bar and a 'Refresh' button. The main content area is divided into two panels: 'Tables' and 'Table definition'. The 'Tables' panel shows a list of tables with columns 'Name', 'Schema', and 'Properties'. A table named 'USER' is listed under the 'ZCR94730' schema. The 'Table definition' panel shows the structure of the 'USER' table with columns: 'USERNAME' (VARCHAR, 32, nullable), 'PASSWORD' (VARCHAR, 32, nullable), and 'MAILID' (VARCHAR, 32, nullable). A 'View data' button is visible at the bottom of the 'Table definition' panel. The bottom of the screenshot shows the Windows taskbar with icons for the Start menu, File Explorer, Google Chrome, Microsoft Edge, and Word, along with the system clock showing 12:15 PM on 10/26/2022.

Service Details - IBM Cloud x IBM Db2 on Cloud x +

bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions... ☆ Incognito

Snack - React Nativ... Wallpaper-App/test...

IBM Db2 on Cloud

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

Find schemas or tables Refresh

SQL Schemas

Tables New table +

Name	Schema	Properties
USER	ZCR94730	...

Total: 1, selected: 1

Table definition

USER No statistics available.

Name	Data type	Nullable	Length
USERNA ME	VARCHAR	Y	32
PASSWO RD	VARCHAR	Y	32
MAILID	VARCHAR	Y	32

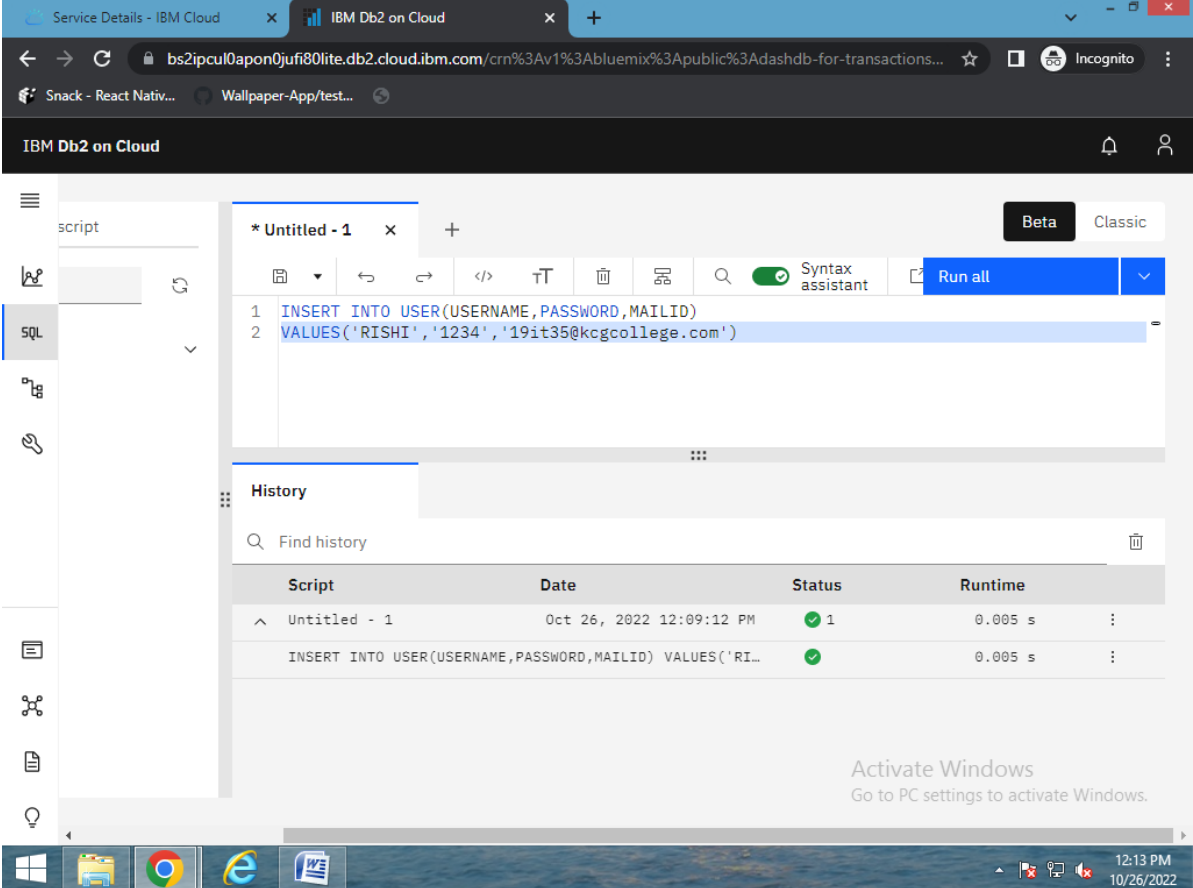
View data

Activate Windows  
Go to PC settings to activate Windows.

12:15 PM  
10/26/2022

2. Perform UPDATE,DELETE Queries with user table.

### UPDATE TABLE:-



The screenshot displays the IBM Db2 on Cloud web interface. The browser address bar shows the URL: `bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions...`. The interface includes a sidebar with navigation icons and a main workspace. The workspace has a top toolbar with icons for file operations, a 'Run all' button, and a 'Syntax assistant' toggle. Below the toolbar is a script editor with two lines of SQL code:

```
1 INSERT INTO USER (USERNAME, PASSWORD, MAILID)
2 VALUES ('RISHI', '1234', '19it35@kcgcollege.com')
```

Below the script editor is a 'History' section with a search bar and a table of execution history:

Script	Date	Status	Runtime
Untitled - 1	Oct 26, 2022 12:09:12 PM	✓ 1	0.005 s
INSERT INTO USER (USERNAME, PASSWORD, MAILID) VALUES ('RI...		✓	0.005 s

An 'Activate Windows' watermark is visible in the bottom right corner of the interface.

Service Details - IBM Cloud

IBM Db2 on Cloud

bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com/crm%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions...Incognito

Snack - React Nativ...Wallpaper-App/test...

IBM Db2 on Cloud

Load DataLoad HistoryTablesViewsIndexesAliasesMQTsSequencesApplication objects

ZCR94730.USER

Back

Export to CSV

USERNAME	PASSWORD	MAILID
RISHI	1234	19it35@kcgcollege.com

Activate Windows  
Go to PC settings to activate Windows.

## DELETE TABLE:-

The screenshot shows the IBM Db2 on Cloud console interface. The browser address bar displays the URL: `bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions...`. The console header shows the database name **IBM Db2 on Cloud**. The left sidebar contains navigation icons for SQL, Tables, Views, Indexes, Aliases, MQTs, Sequences, and Application objects. The main content area is titled **ZCR94730.USER** and shows a table with the following data:

USERNAME	PASSWORD	MAILID
RISHI	1234	19it35@kcgcollege.com

At the bottom of the console, there is an "Activate Windows" watermark and a taskbar with icons for Windows, File Explorer, Google Chrome, Microsoft Edge, and Word. The system clock in the bottom right corner shows 12:10 on 10/20.

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

**Answer**

S

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-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+VmmDGMN5t9
UJ0Z" 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" value="Login" class="btn btn-primary">Login</button>

        </form>
    </div>

    <div class="text-center">
        <a href="/">register! </a>
    </div>
</body>

</html>

```

```
<button
type="submit"
id="button"
class="btn btn-
primary"> Login
```

```
<div class="note mt-3
text-center">
  <!--Register form -->
  <p> Don't have an
account yet? Click here
to <a
```

## 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:
  bold;
}

input {
  width: 80% !important;
}

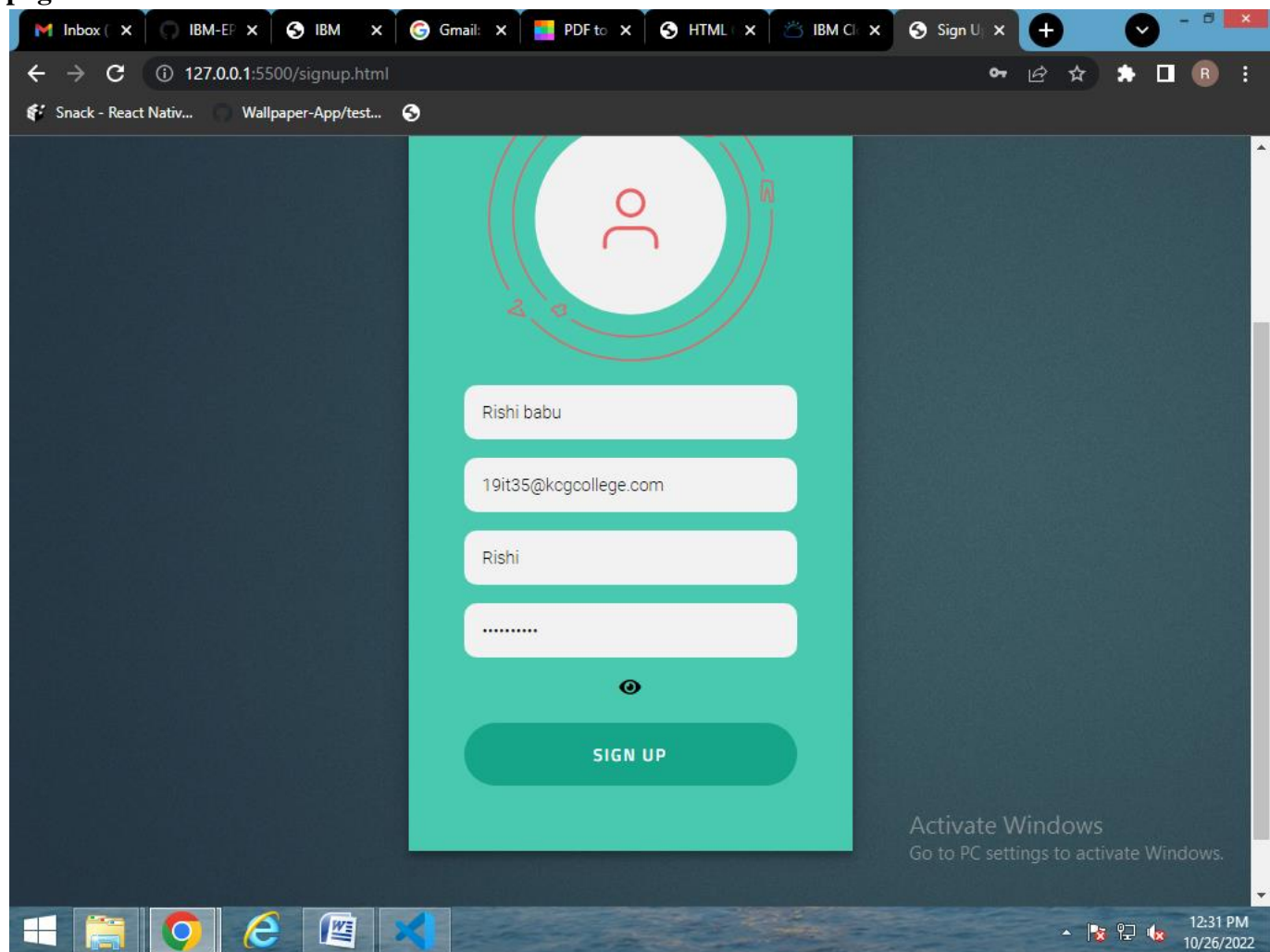
div {
  display: flex;
  align-items:
  center; justify-
  content:
  center; flex-
```

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

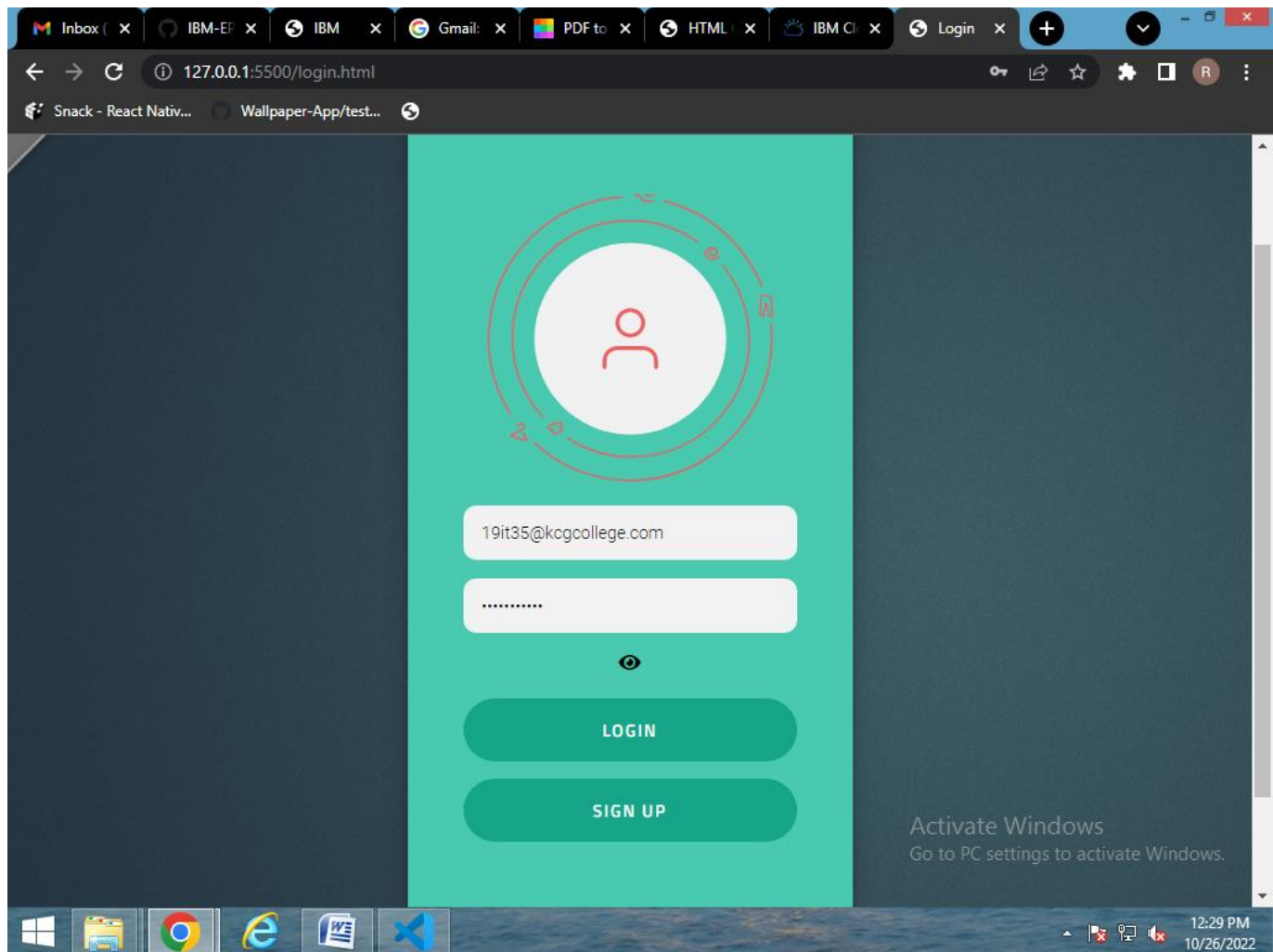
```
.form-text-vk {
    font-size: small;
    padding-bottom:
    10px;
}
```

```
}  
  
.form-text-h2 {  
font-size: x-large;  
padding-top:  
18px;  
}
```

**Output:-**  
**registration**  
**page:-**



**Login Page:-**





## Welcome Page:-

## Data Base Table :-

Service Details - IBM Cloud x IBM Db2 on Cloud x +

bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions... ☆ Incognito

Snack - React Nativ... Wallpaper-App/test...

IBM Db2 on Cloud

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

ZCR94730.USER Back

Export to CSV

USERNAME	PASSWORD	MAILID
RISHI	1234	19it35@kcgcollege.com

Activate Windows  
Go to PC settings to activate Windows.

12:09 PM  
10/26/2022