

Assignment -2

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Question-1:

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

Solution

Creating a users table in Ibm cloud

Table definition

USERS

Approximate 3 rows (32.0 KB)
Updated on 2022-10-31 10:08:01

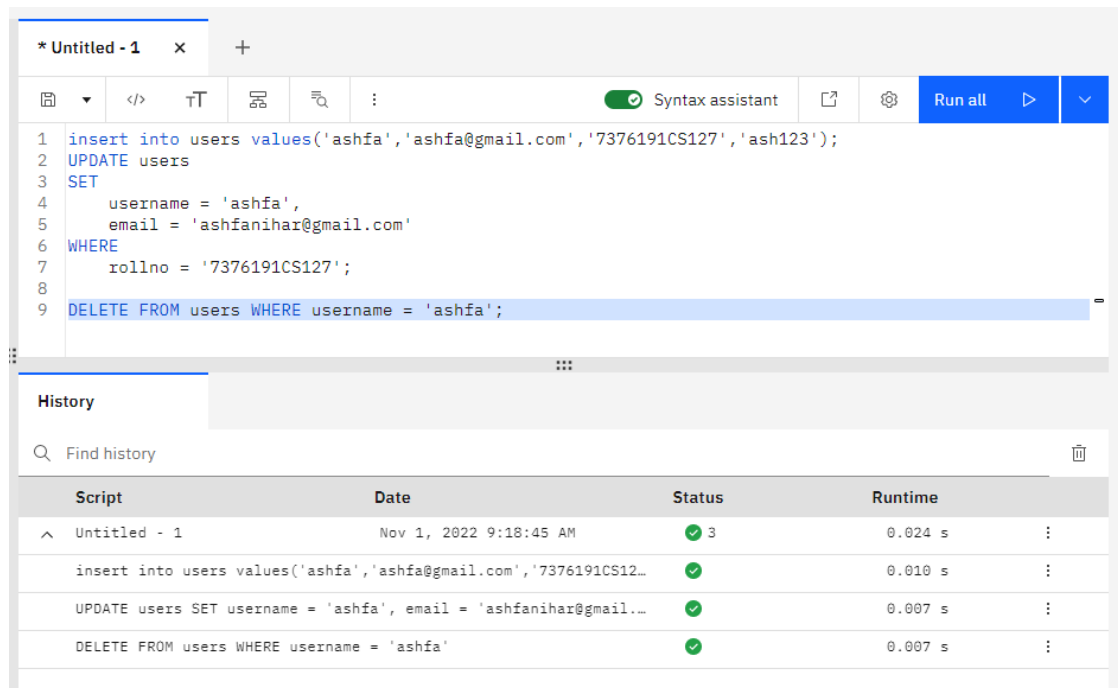
Name	Data type	Nullable	Length	Scale	
USERNAME	VARCHAR	Y	32	0	👁
EMAIL	VARCHAR	Y	32	0	👁
ROLLNO	VARCHAR	Y	32	0	👁
PASSWORD	VARCHAR	Y	32	0	👁

View data

Question-2:

Perform UPDATE,DELETE Queries with user table

Solution



The screenshot shows a SQL IDE window titled '*Untitled - 1'. The script contains the following SQL statements:

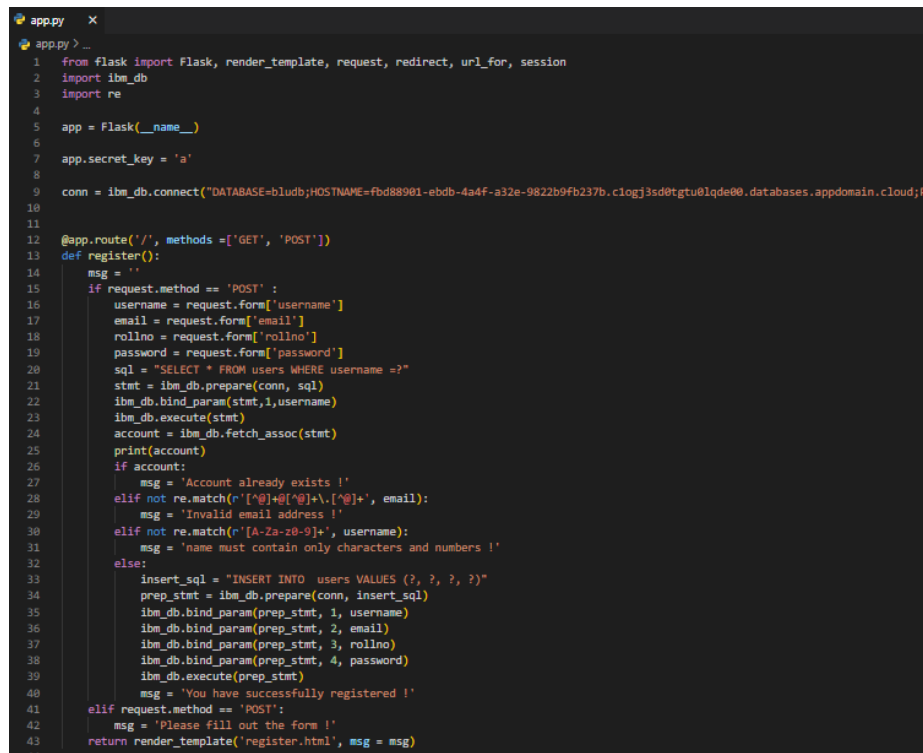
```
1 insert into users values('ashfa','ashfa@gmail.com','7376191CS127','ash123');
2 UPDATE users
3 SET
4     username = 'ashfa',
5     email = 'ashfanihar@gmail.com'
6 WHERE
7     rollno = '7376191CS127';
8
9 DELETE FROM users WHERE username = 'ashfa';
```

Below the script editor is a 'History' section with a search bar and a table of executed queries.

Script	Date	Status	Runtime
Untitled - 1	Nov 1, 2022 9:18:45 AM	✓ 3	0.024 s
insert into users values('ashfa','ashfa@gmail.com','7376191CS12...		✓	0.010 s
UPDATE users SET username = 'ashfa', email = 'ashfanihar@gmail...		✓	0.007 s
DELETE FROM users WHERE username = 'ashfa'		✓	0.007 s

Question-3:

Connect python code to db2.



```
app.py
app.py > ...
1 from flask import Flask, render_template, request, redirect, url_for, session
2 import ibm_db
3 import re
4
5 app = Flask(__name__)
6
7 app.secret_key = 'a'
8
9 conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=fbd88901-ebdb-4a4f-a32e-9822b9fb237b.clogj3sd0gtu0lqde00.databases.appdomain.cloud;P
10
11
12 @app.route('/', methods = ['GET', 'POST'])
13 def register():
14     msg = ''
15     if request.method == 'POST':
16         username = request.form['username']
17         email = request.form['email']
18         rollno = request.form['rollno']
19         password = request.form['password']
20         sql = "SELECT * FROM users WHERE username =?"
21         stmt = ibm_db.prepare(conn, sql)
22         ibm_db.bind_param(stmt,1,username)
23         ibm_db.execute(stmt)
24         account = ibm_db.fetch_assoc(stmt)
25         print(account)
26         if account:
27             msg = 'Account already exists !'
28         elif not re.match(r'([a-zA-Z0-9]+@[a-zA-Z0-9]+\.[a-zA-Z]+)', email):
29             msg = 'Invalid email address !'
30         elif not re.match(r'[A-Za-z0-9]+', username):
31             msg = 'name must contain only characters and numbers !'
32         else:
33             insert_sql = "INSERT INTO users VALUES (?, ?, ?, ?)"
34             prep_stmt = ibm_db.prepare(conn, insert_sql)
35             ibm_db.bind_param(prepare_stmt, 1, username)
36             ibm_db.bind_param(prepare_stmt, 2, email)
37             ibm_db.bind_param(prepare_stmt, 3, rollno)
38             ibm_db.bind_param(prepare_stmt, 4, password)
39             ibm_db.execute(prepare_stmt)
40             msg = 'You have successfully registered !'
41         elif request.method == 'POST':
42             msg = 'Please fill out the form !'
43         return render_template("register.html", msg = msg)
44
```

Question-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

Registration Page:

Registration page

Username:

ashfa

Email:

ashfa@gmail.com

Roll number:

7376191CS127

Password:

Register

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

Code:

```
templates > register.html > ...
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
5    <link rel="stylesheet" href="../static/CSS/style.css" />
6    <title>Registration page</title>
7  </head>
8  <body>
9    <form action="http://localhost:5000/" method="post">
10     <div class="container">
11       <h1>Registration page</h1>
12       <hr />
13
14       <div class="msg">{{ msg }}</div>
15
16       <label for="username"><b>Username:</b></label>
17       <input
18         type="text"
19         placeholder="Enter your Username"
20         name="username"
21         id="username"
22         required
23       />
24
25       <label for="email"><b>Email:</b></label>
26       <input
27         type="text"
28         placeholder="Enter your Email"
29         name="email"
30         id="email"
31         required
32       />
33
34       <label for="rollno"><b>Roll number:</b></label>
35       <input
36         type="text"
37         id="rollno"
38         name="rollno"
39         placeholder="Enter your Rollno"
40       />
41
42       <label for="password"><b>Password:</b></label>
43       <input
44         type="password"
45         id="password"
46         name="password"
47         placeholder="Enter your password"
48       />
49
50       <button type="submit" class="registerbtn">Register</button>
51     </div>
52   </form>
53 </body>
54 </html>
```

Login Page:

Login Form

Username:

ashfa

Password:

.....

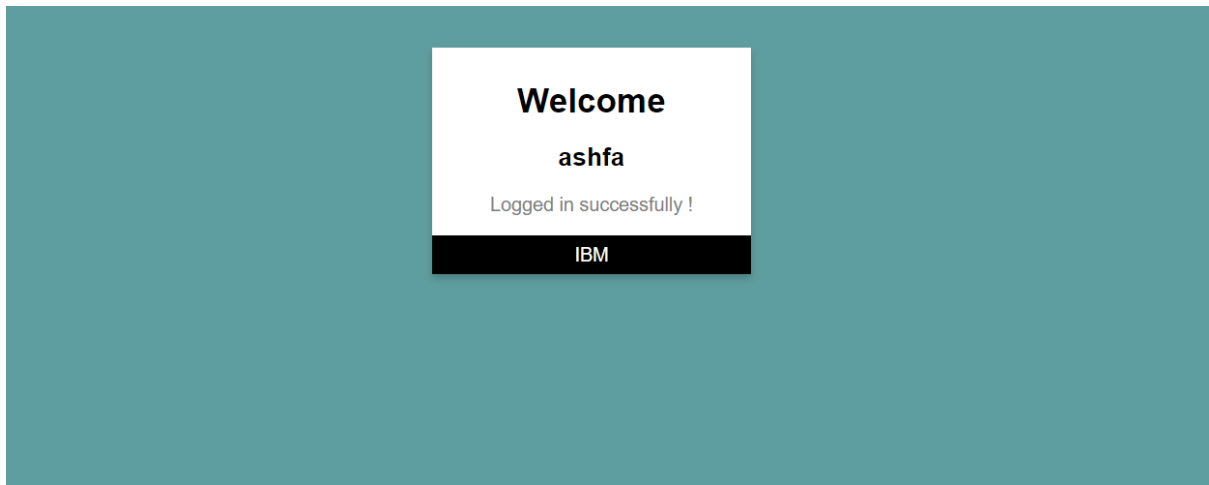
Login

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

Code:

```
templates > login.html > html > body > div.container > div.login.text-center.mt-5
  <title>Login Page</title>
  <link rel="stylesheet" href="../../static/CSS/style.css" />
</head>
<body>
  <div class="container">
    <div class="login text-center mt-5">
      <h1>Login Form</h1>
      <hr>
      <form action="/login" method="post">
        <div class="msg">{{ msg }}</div>
        <label for="username"><b>Username:</b></label>
        <input
          type="text"
          name="username"
          placeholder="Enter Your Username"
          id="username"
          required
        />
        <label for="password"><b>Password:</b></label>
        <input
          type="password"
          name="password"
          placeholder="Enter Your Password"
          id="password"
          required
        />
        <button type="submit" id="button" class="registerbtn">Login</button>
      </form>
    </div>
    <div class="note mt-3 text-center">
      <p>
        Don't have an account yet? Click here to <a href="/">register! </a>
      </p>
    </div>
  </div>
</body>
</html>
```

Welcome Page:



Code:

```
templates > display.html > html > body
1  <!DOCTYPE html>
2  <html lang="en">
3    <head>
4      <meta charset="UTF-8" />
5      <meta http-equiv="X-UA-Compatible" content="IE=edge" />
6      <meta name="viewport" content="width=device-width, initial-scale=1.0" />
7      <link rel="stylesheet" href="../static/CSS/display.css" />
8      <title>Welcome Page</title>
9    </head>
10   <body style="background-color: cadetblue;">
11
12     <div class="card">
13       <h1>Welcome</h1>
14       <h2>{{name}}</h2>
15       <p class="title">{{ msg }}</p>
16       <p></p>
17
18       <p><button>IBM</button></p>
19     </div>
20
21   </body>
22 </html>
23
```