

**Assignment -2 IBM
CLOUD DB2**

| | |
|---------------------|--------------|
| Student Name | Sam Joel D |
| Student Roll Number | 950919104019 |
| Maximum Marks | 2 Marks |

Questions:

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

The screenshot displays the IBM Db2 on Cloud web interface. The 'Tables' tab is selected, showing a list of tables in the 'YYQ77988' schema. A table named 'USERTABLE' is listed. The 'Table definition' panel on the right shows the table's structure:

| Name | Data type | Nullable | Length | Scale |
|------------|-----------|----------|--------|-------|
| USERNAME | CHAR | Y | 5 | 0 |
| ROLLNUMBER | INTEGER | Y | | 0 |
| EMAIL | CHAR | Y | 5 | 0 |
| PASSWORD | VARCHAR | Y | 32 | 0 |

The interface also includes a search bar, a 'New table' button, and a 'View data' button. The bottom status bar shows the system time as 8:40 AM on 11/21/2022.

2. Perform UPDATE,DELETE Queries with user table.

UPDATE TABLE:-

IBM Db2 on Cloud

bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com/cm%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aeu-gb%3Aa%2F12be0332ac64f61814747279fff1d05%3A9091c...

Google YouTube HOLY CROSS ENGL...

IBM Db2 on Cloud

Data objects Saved objects

Filter objects

YYQ77988

SQL

Untitled - 1

1 INSERT INTO USERTABLE VALUES ('SJ','23','sj@gmail.com','432')

Syntax assistant

Run selected

History

Find history

| Script | Date | Status | Runtime |
|---|-------------------------|--------|---------|
| Untitled - 1 | Nov 21, 2022 8:47:13 AM | 1 | 0.010 s |
| INSERT INTO USERTABLE VALUES ('SJ','23','sj@gmail.com','432') | | | 0.010 s |

73°F Partly sunny

Search

ENG IN

8:47 AM 11/21/2022

IBM Db2 on Cloud

bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com/cm%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aeu-gb%3Aa%2F12be0332ac64f61814747279fff1d05%3A9091c...

Google YouTube HOLY CROSS ENGL...

IBM Db2 on Cloud

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

YYQ77988.USERTABLE

Back

Export to CSV

| USERNAME | ROLLNUMBER | EMAIL | PASSWORD |
|----------|------------|--------------|----------|
| SJ | 21 | sj@gmail.com | 432 |

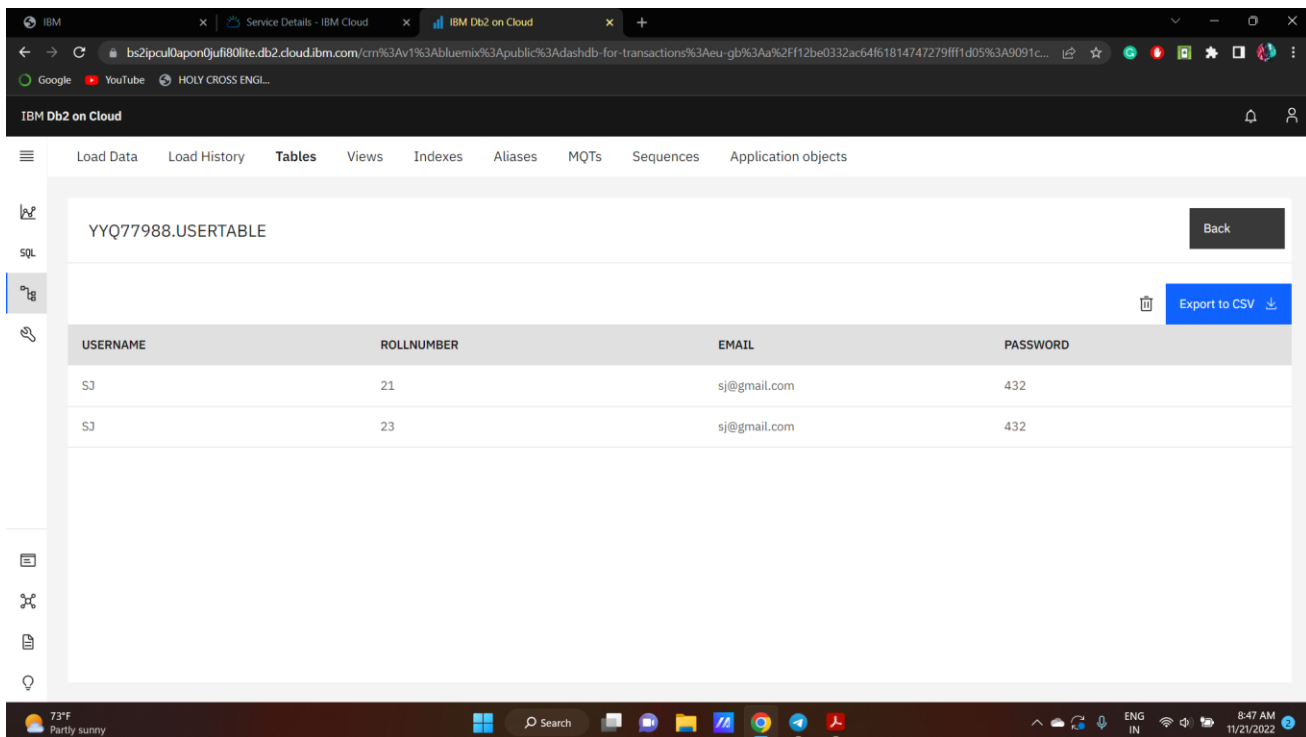
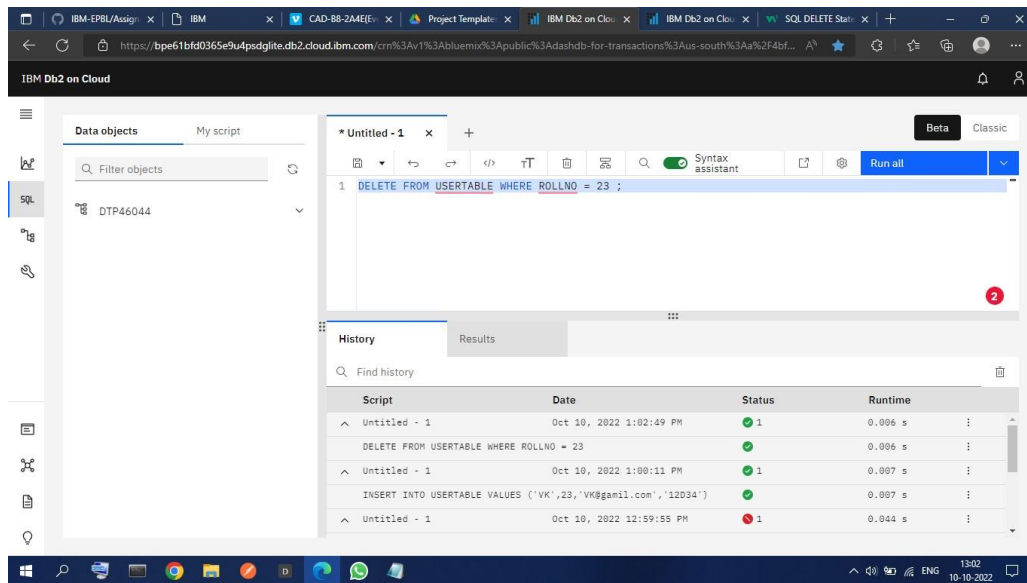
73°F Partly sunny

Search

ENG IN

8:49 AM 11/21/2022

DELETE TABLE:-



The screenshot shows the IBM Db2 on Cloud console interface. The top navigation bar includes 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The 'Tables' tab is selected, and the table 'YYQ77988.USERTABLE' is displayed. The table has four columns: 'USERNAME', 'ROLLNUMBER', 'EMAIL', and 'PASSWORD'. A single row of data is visible, with values 'SJ', '21', 'sj@gmail.com', and '432'. An 'Export to CSV' button is located in the top right corner of the table view. The bottom of the image shows a Windows taskbar with the date and time '8:49 AM 11/21/2022'.

| USERNAME | ROLLNUMBER | EMAIL | PASSWORD |
|----------|------------|--------------|----------|
| SJ | 21 | sj@gmail.com | 432 |

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=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/fontawesome/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/favicon32x32.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/fontawesome/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;
}

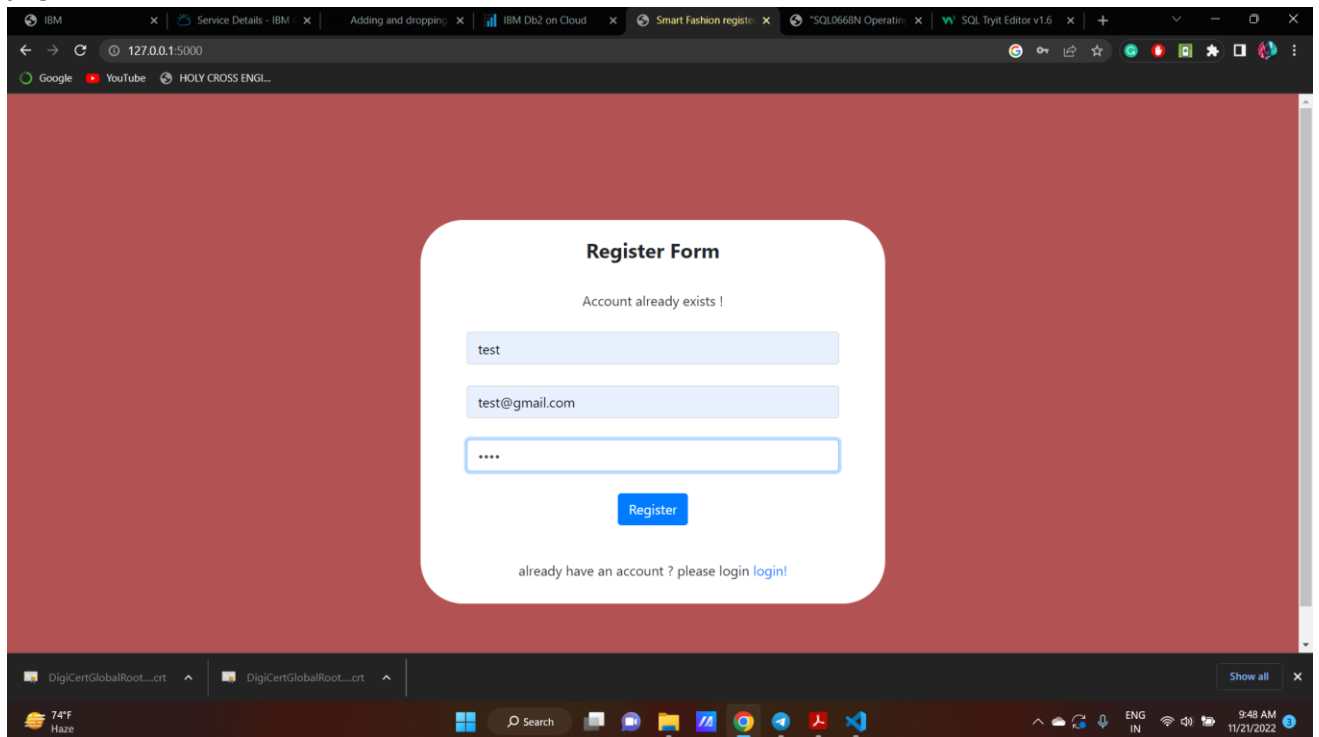
body {
background-color: aqua
!important; display: flex;
flex-direction: column; align-
items: center; justify-content:
center;
} form { display:
flex; flex-direction:
column; align-items:
center; justify-
content: center;
background-color: white;
width: 40%; height:
450px; border-radius:
50px; margin: 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:-

IBM Service Details - IBM Adding and droppin IBM Db2 on Cloud Smart Fashion Login *SQL0668N Operatin SQL Tryit Editor v1.6

127.0.0.1:5000/login

Google YouTube HOLY CROSS ENGL...

Login Form

Username

Password

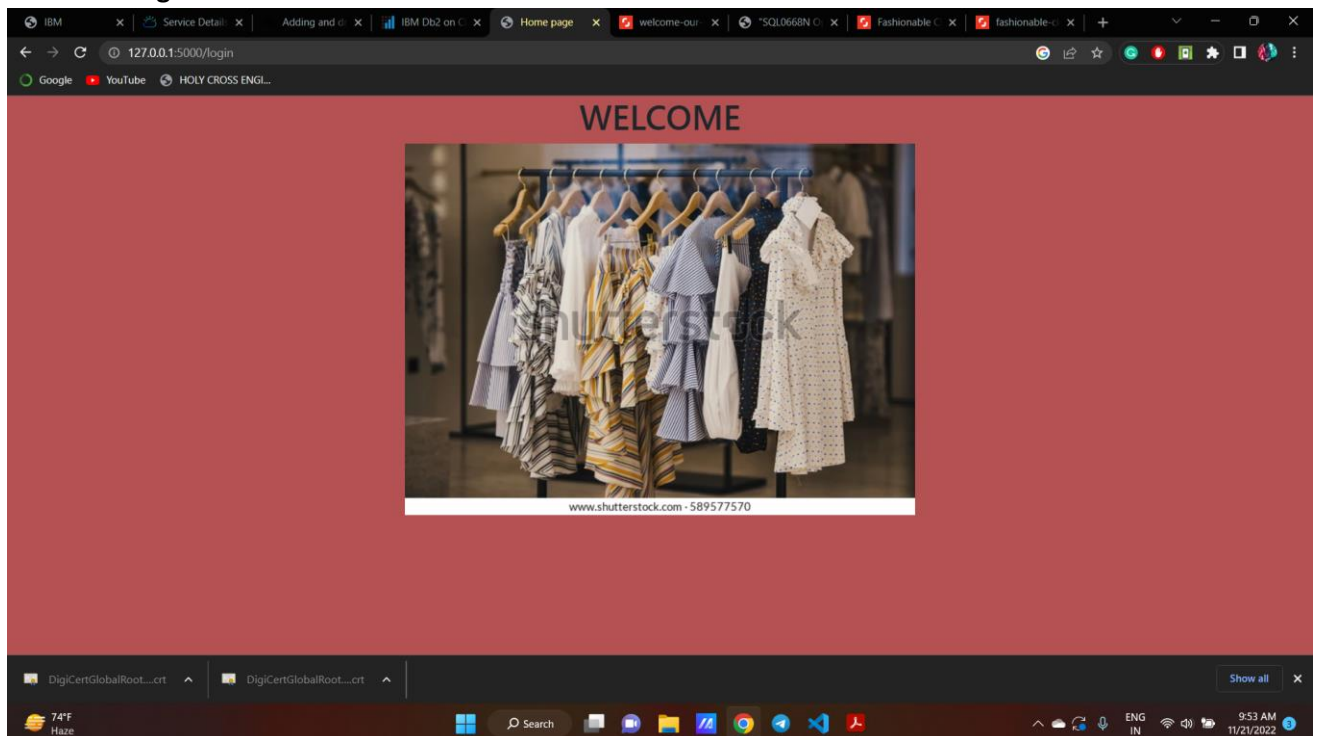
Login

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

DigiCertGlobalRoot... DigiCertGlobalRoot... Show all

74°F Haze Search 9:48 AM 11/21/2022

Welcome Page:-



Data Base Table :-

The screenshot displays the IBM Db2 on Cloud web interface. The browser's address bar shows the URL: `bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com/crm%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aeu-gb%3Aa%2Ff12be0332ac64f61814747279fff1d05%3A9091c...`. The page title is "IBM Db2 on Cloud". The navigation menu includes "Load Data", "Load History", "Tables", "Views", "Indexes", "Aliases", "MQTs", "Sequences", and "Application objects". The "Tables" tab is selected, showing the table "YYQ77988.USERTABLE". A "Back" button is in the top right. Below the table name, there is a trash icon and an "Export to CSV" button. The table structure is as follows:

| USERNAME | EMAIL | PASSWORD |
|----------|----------------|----------|
| SJ | s@gmail.com | 432 |
| TEST | test@gmail.com | 1234 |

The Windows taskbar at the bottom shows the system clock as 9:48 AM on 11/21/2022, with the language set to ENG IN.