

Assignment -2

Assignment Date	3 October 2022
Student Name	Rohit.P
Student Roll Number	311519205053
Maximum Marks	2 Marks

Question-1:

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

The screenshot shows the IBM Db2 on Cloud console. The 'Tables' tab is selected, and the 'USERS' table is highlighted. The table definition is shown on the right, with columns: EMAIL (VARCHAR, 32, Y, 0), NAME (VARCHAR, 32, Y, 0), and PASSWORD (VARCHAR, 32, Y, 0). The table is located in the VST02824 schema.

Name	Data type	Nullable	Length	Scale
EMAIL	VARCHAR	Y	32	0
NAME	VARCHAR	Y	32	0
PASSWORD	VARCHAR	Y	32	0

- insert into USERS values('ganesh@gmail.com','Ganesh',1000);
- insert into USERS values('avinash@gmail.com','Avinash',1001);
- insert into USERS values('udhaya@gmail.com','Udhaya',1002);
- insert into USERS values('dharshan@gmail.com','Priyadharshan',1003);
- insert into USERS values('rohit@gmail.com','Rohit',1004);
- insert into USERS values('abcd@gmail.com','abcd',1005);

The screenshot shows the IBM Db2 on Cloud console displaying the data in the 'USERS' table. The table has columns: EMAIL, NAME, and PASSWORD. The data is as follows:

EMAIL	NAME	PASSWORD
abcd@gmail.com	abcd	1005
avinash@gmail.com	Avinash	1001
dharshan@gmail.com	Priyadharshan	1003
ganesh@gmail.com	Ganesh	1000
rohit@gmail.com	Rohit	1004
udhaya@gmail.com	Udhaya	1002

Question-2:

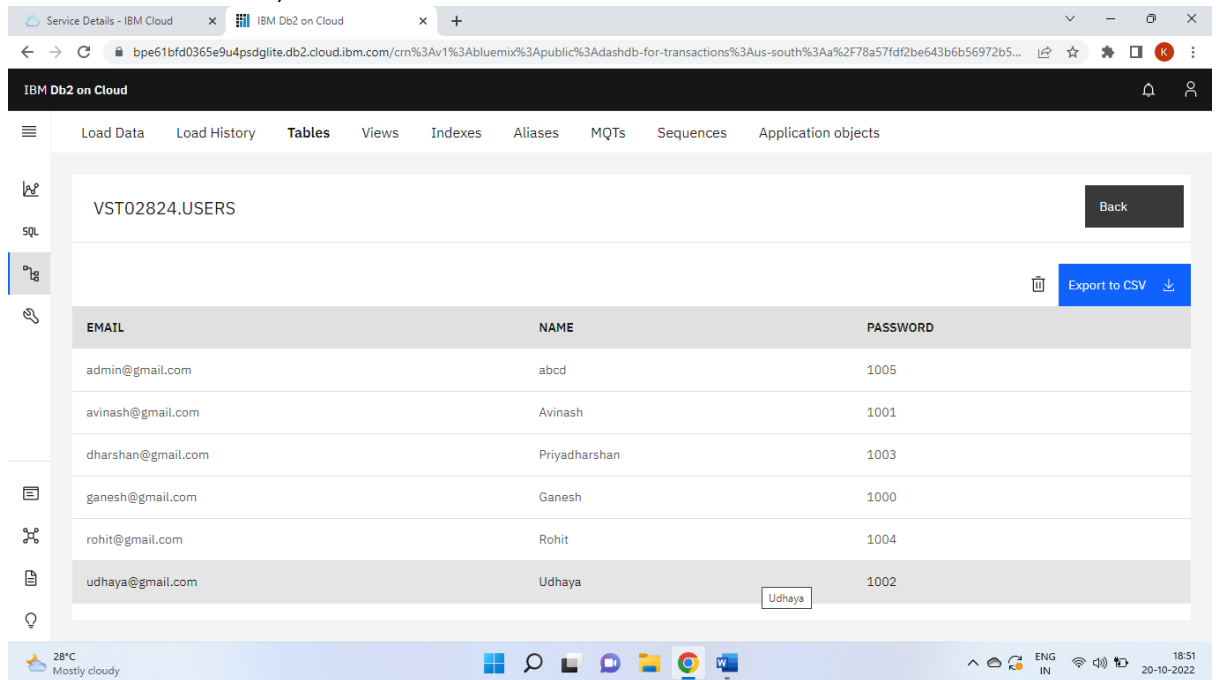
Perform UPDATE, DELETE Queries with user table

1.

UPDATE USERS

SET EMAIL = 'admin@gmail.com'

WHERE NAME = 'abcd';



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

bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/cm%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2F78a57fdf2be643b6b56972b5...

IBM Db2 on Cloud

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

VST02824.USERS Back

Export to CSV

EMAIL	NAME	PASSWORD
admin@gmail.com	abcd	1005
avinash@gmail.com	Avinash	1001
dharshan@gmail.com	Priyadharshan	1003
ganesh@gmail.com	Ganesh	1000
rohit@gmail.com	Rohit	1004
udhaya@gmail.com	Udhaya	1002

Udhaya

28°C Mostly cloudy 18:51 20-10-2022

2. delete from USERS where NAME='abcd';

The screenshot displays the IBM Db2 on Cloud web interface. The top navigation bar includes 'Service Details - IBM Cloud' and 'IBM Db2 on Cloud'. The main interface is divided into two sections: 'Data objects' and 'My script'.

In the 'Data objects' section, a search bar labeled 'Filter objects' is present. Below it, a list of objects is shown, including 'VST02824'. The 'My script' section shows a script editor with the following SQL command:

```
delete from USERS where NAME='abcd';
```

Below the script editor, a 'History' table lists recent script executions:

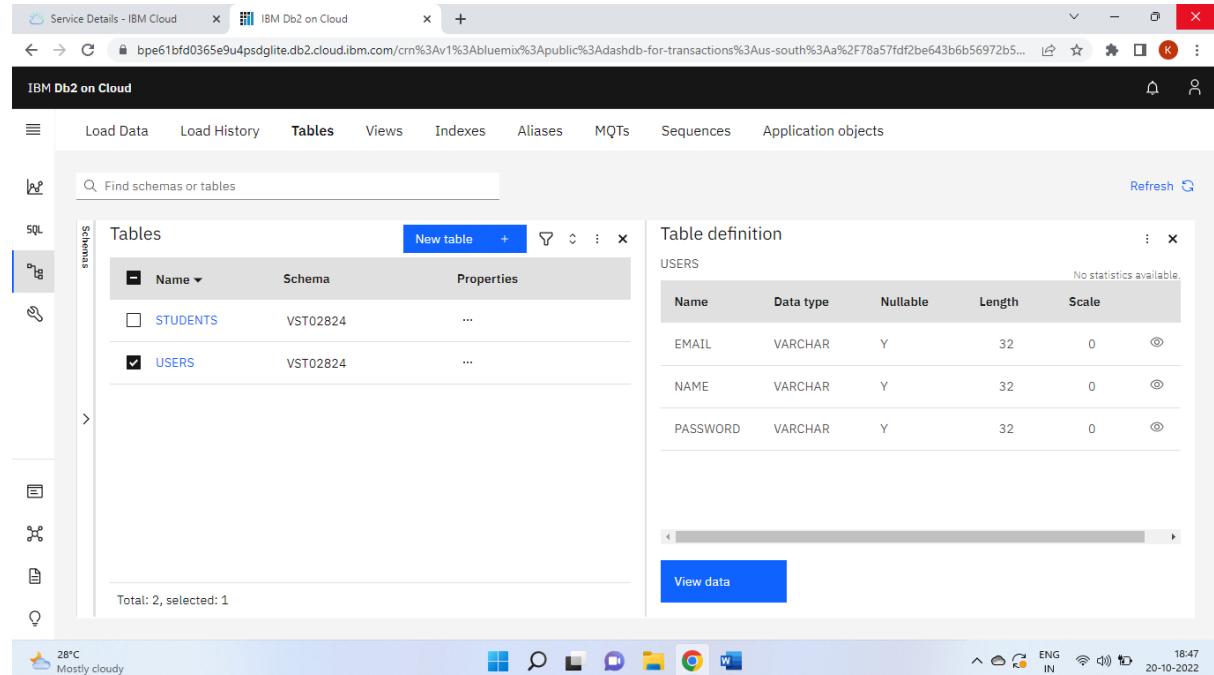
Script	Date	Status	Runtime
Untitled - 1	Oct 20, 2022 6:51:29 PM	✓ 1	0.009 s
delete from USERS where NAME='abcd'		✓	0.009 s
Untitled - 1	Oct 20, 2022 6:50:28 PM	✓ 1	0.010 s
UPDATE USERS SET EMAIL = 'admin@gmail.com' WHERE NAME = 'abcd'		✓	0.010 s
Untitled - 1	Oct 20, 2022 6:49:35 PM	✓ 1	0.017 s

The bottom section of the interface shows the 'Tables' tab selected. The table 'VST02824.USERS' is displayed with the following data:

EMAIL	NAME	PASSWORD
avinash@gmail.com	Avinash	1001
dharshan@gmail.com	Priyadharshan	1003
ganesh@gmail.com	Ganesh	1000
rohit@gmail.com	Rohit	1004
udhaya@gmail.com	Udhaya	1002

The interface also includes a 'Back' button and an 'Export to CSV' button. The bottom status bar shows the temperature as 28°C, mostly cloudy, and the time as 18:51 on 20-10-2022.

Question 3:



The screenshot shows the IBM Db2 on Cloud console interface. The 'Tables' tab is active, displaying a list of tables. The 'USERS' table is selected, and its definition is shown on the right. The table has columns: EMAIL (VARCHAR, 32, nullable), NAME (VARCHAR, 32, nullable), and PASSWORD (VARCHAR, 32, nullable). The 'View data' button is visible at the bottom of the table definition panel.

Connect python code to db2

Program:

```
from flask import Flask
import ibm_db
```

```
app=Flask(__name__)
```

```
try:
```

```
    conn=ibm_db.connect("DATABASE=bludb;HOSTNAME=6667d8e9-9d4d-4ccb-ba32-
21da3bb5aafc.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=30376;SECURITY=SSL;SSLSe
rverCertificate=DigiCertGlobalRootCA.crt;UID=prj41491;PWD=8NNe2bnsXzveXAcg", "", "")
```

```
except:
```

```
    print("Unable to connect: ",ibm_db.conn_error())
```

```
@app.route("/")
```

```
def dashboard():
```

```
    return "welcome"
```

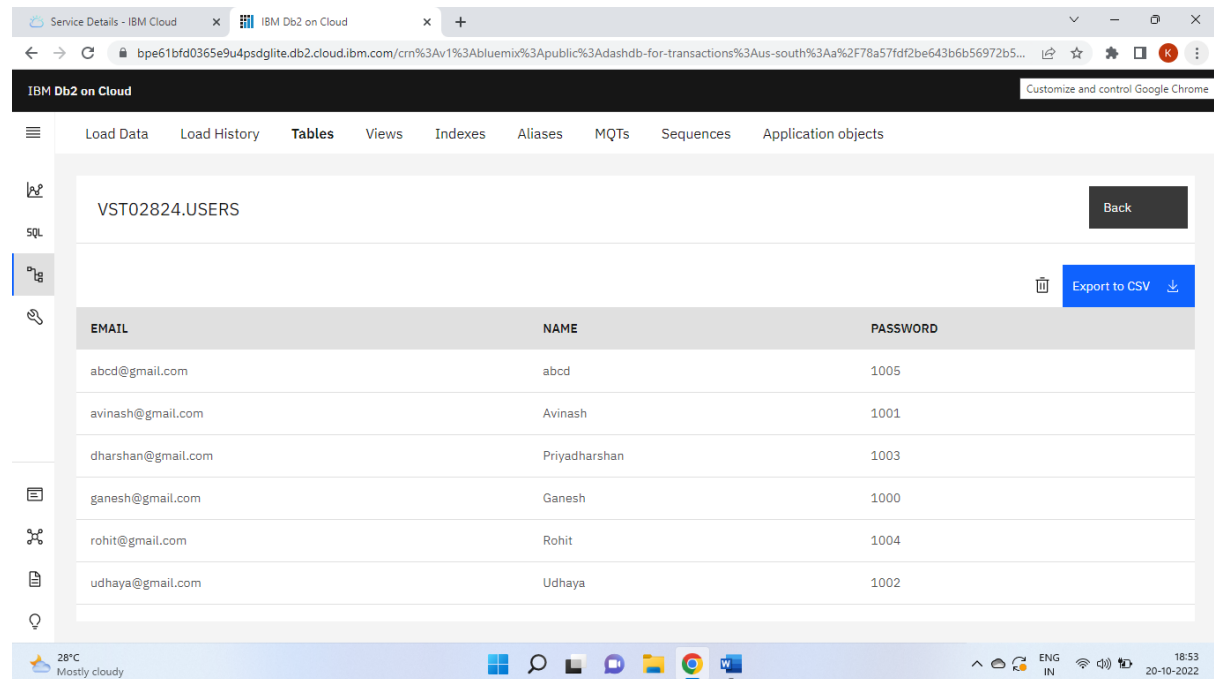
```
if __name__=='__main__':
```

```
    app.run(debug=True)
```

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 username and password. If the user is valid show the welcome page.

Database:



The screenshot shows the IBM Db2 on Cloud web interface. The table 'VST02824.USERS' is displayed with the following data:

EMAIL	NAME	PASSWORD
abcd@gmail.com	abcd	1005
avinash@gmail.com	Avinash	1001
dharshan@gmail.com	Priyadharshan	1003
ganesh@gmail.com	Ganesh	1000
rohit@gmail.com	Rohit	1004
udhaya@gmail.com	Udhaya	1002

Program:

User.py

```
from flask import Flask, render_template, request, redirect, url_for, session, flash
```

```
import ibm_db
```

```
app=Flask(__name__)
```

```
app.secret_key='a'
```

```
try:
```

```
    conn=ibm_db.connect("DATABASE=bludb;HOSTNAME=6667d8e9-9d4d-4ccb-ba32-21da3bb5aafc.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=30376;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=prj41491;PWD=8NNe2bnsXzveXAcg", "", "")
```

```
except:
```

```
    print("Unable to connect: ", ibm_db.conn_error())
```

```
@app.route("/")
```

```
def dash():
```

```
    return render_template('register.html', msg=" ")
```

```
@app.route("/register", methods=['GET', 'POST'])
```

```
def register():
```

```
    error = None
```

```

if request.method=='POST':
    username=request.form['username']
    email=request.form['email']
    roll_number=request.form['rollnumber']
    password=request.form['password']
    sql="SELECT * FROM user WHERE roll_number=?"
    prep_stmt=ibm_db.prepare(conn,sql)
    ibm_db.bind_param(prepare_stmt,1,roll_number)
    ibm_db.execute(prepare_stmt)
    account=ibm_db.fetch_assoc(prepare_stmt)
    print(account)
    if account:
        error="Account already exists! Log in to continue !"
    else:
        insert_sql="INSERT INTO user values(?,?,?,?)"
        prep_stmt=ibm_db.prepare(conn,insert_sql)
        ibm_db.bind_param(prepare_stmt,1,email)
        ibm_db.bind_param(prepare_stmt,2,username)
        ibm_db.bind_param(prepare_stmt,3,roll_number)
        ibm_db.bind_param(prepare_stmt,4,password)
        ibm_db.execute(prepare_stmt)
        flash(" Registration successfull. Log in to continue !")
else:
    pass
return render_template('login.html',error=error)

```

```

@app.route('/login',methods=['GET','POST'])
def login():
    error = None
    if request.method=='POST':
        username=request.form['username']
        password=request.form['password']
        sql="SELECT * FROM user 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']
            session["username"]=account["USERNAME"]
            flash("Logged in successfully!")
            return redirect(url_for("welcome_page"))
        else:

```

```

        error="Incorrect username / password"
        return render_template('login.html',error=error)

@app.route('/welcome')
def welcome_page():
    return render_template("welcome.html",user=session['id'])

if __name__=='__main__':
    app.run(debug=True)

```

register.html

```

<html>
<head>
    <title>Registration page</title>
    <link rel="stylesheet" href="{{url_for('static', filename='style.css')}}">
</head>
<body>
    <div class="center"> <br /><br />
    <form action="/register" method="POST">
        <h2>Student Registration Portal</h2> <br /><br />
        <p> Enter Email ID:</p>
        <input type="email" name="email"/>
        <p> Enter Username:</p>
        <input type="text" name= "username" />
        <p> Enter Password:</p>
        <input type="password" name="password"/>
        <p> Enter Roll number:</p>
        <input type="text" name="rollnumber"/>
        <br><br><br>
        <input type="submit" value="submit" />

    </form>
    </div>
</body>
</html>

```

login.html

```

<html>
<head>
    <title>Login page</title>
    <link rel="stylesheet" href="{{url_for('static', filename='style.css')}}">
</head>
<body>

```

```

{% if error %}
    <p><strong style="color:red">Error</strong>: {{error}}</p>
{% endif %}
{% with messages = get_flashed_messages() %}
    {% if messages %}
        {% for message in messages %}
            <p style="color:green">{{ message }}</p>
        {% endfor %}
    {% endif %}
{% endwith %}
<div class="center"> <br /><br />
<form action="/login" method="POST">
<h1>Login</h1> <br /><br />
    <p> Enter Username:</p>
    <input type="text" name= "username" />
    <p> Enter Password:</p>
    <input type="password" name="password"/>
    <br><br><br>
    <input type="submit" value="submit" />
</form>
</div>
</body>
</html>

```

welcome.html

```

<html>
<head>
    <title>Login page</title>
    <link rel="stylesheet" href="{{url_for('static', filename='style.css')}}">
</head>
<body>
{% with messages = get_flashed_messages() %}
    {% if messages %}
        {% for message in messages %}
            <p style="color:green">{{ message }}</p>
        {% endfor %}
    {% endif %}
{% endwith %}

    <br /><br />
<center>
    <h2 > User {{user}}</h2> <br />
    <br /><br />
    <p><i>As long as you keep yourself focused, you will have a mighty mind that can make
everything possible.</i></h3>

```



```
</center><br/>
<div style="margin:40px">
  <p>Education can open our eyes and expand our minds unlike anything else.
  It allows us to continually reshape how we see the world, leading to an improved and more well-
  rounded life.

  We welcome you with a sense of pride and excitement.Education is a state of mind. It's a way of
  thinking. It's an attitude. On an individual level it's in constant flux, always changing.
  Education is not, as most falsely believe, a bunch of certificates. Nor is it a set of abbreviations before
  or after one's name.</p>

  <p>Utilize every moment to prepare your mind and body for future endeavors!
  Always look for how much progress can be made rather than perfection. Life will be a lot easier.
  Do not give up no matter what, always try just one more time, and eventually you will be successful.
  Victories teach you to be humble, but mistakes make you more skillful. So just do your best!
  Your hard work will never go in vain! Be diligent towards your dreams and you will reach there soon
  enough!
  Nothing can stop you from reaching your goals as long as you work hard. Your goals are simply
  dedication and determination away.</p>

  <p>In today's world everyone wants to be successful but what is a success. The perspective of
  success varies from person to person. For the record, the people before us have a different view on
  success and the person after us will have a different view on success.
  Moreover, people compare different people performance to evaluate their success. But success is not
  something that you can copy from others. You have to make your own path to achieving success. In
  modern-day, people are obsessed with success because of the glamour and lifestyle of successful
  people.</p>

  <h3>What formulates a person successful?</h3>

  <p>There are many ways in the world to be successful. But most people think of celebrities, artist,
  politicians, and businessmen whenever they heard the word success.
  Moreover, they think doing what they will make you successful but that not the case. They forget the
  most basic thing that makes a person successful that is their hard work, dedication, and the desire to
  achieve their dream. More importantly, they what they like to do not what that others told them to
  do. Successful people do what they like to do also they do what they feel correct for their business.
  If you look in the dictionary for the meaning of the word success then you will find that it means the
  achievement of one's goal or aim. So, basically, anyone can achieve success by simply achieving their
  aim or goal.</p>
</div>
</body>
</html>
```

style.css

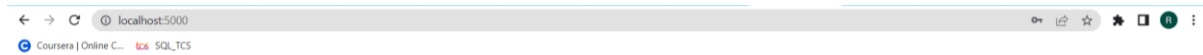
```
.center{
margin: auto;
width: 15%;
}
h2{
```

```

text-align:center;
}
input{
border-radius:5px;
padding:7px;
}

```

Output:



Student Registration Portal

Enter Email ID:

Enter Username:

Enter Password:

Enter Roll number:

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

bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/cm%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2F78a57fd2be643b6b56972b5...

IBM Db2 on Cloud Customize and control Google Chrome

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

VST02824.USERS Back

Export to CSV

EMAIL	NAME	PASSWORD
abcd@gmail.com	abcd	1005
avinash@gmail.com	Avinash	1001
dharshan@gmail.com	Priyadharshan	1003
ganesh@gmail.com	Ganesh	1000
rohit@gmail.com	Rohit	1004
udhaya@gmail.com	Udhaya	1002

28°C Mostly cloudy 18:53 20-10-2022

Login

Enter Username:

Enter Password:

Logged in successfully!

User abcd



As long as you keep yourself focused, you will have a mighty mind that can make everything possible.

Education can open our eyes and expand our minds unlike anything else. It allows us to continually reshape how we see the world, leading to an improved and more well-rounded life. We welcome you with a sense of pride and excitement. Education is a state of mind. It's a way of thinking. It's an attitude. On an individual level it's in constant flux, always changing. Education is not, as most falsely believe, a bunch of certificates. Nor is it a set of abbreviations before or after one's name.

Utilize every moment to prepare your mind and body for future endeavors! Always look for how much progress can be made rather than perfection. Life will be a lot easier. Do not give up no matter what, always try just one more time, and eventually you will be successful. Victories teach you to be humble, but mistakes make you more skillful. So just do your best! Your hard work will never go in vain! Be diligent towards your dreams and you will reach there soon enough! Nothing can stop you from reaching your goals as long as you work hard. Your goals are simply dedication and determination away.

In today's world everyone wants to be successful but what is a success. The perspective of success varies from person to person. For the record, the people before us have a different view on success and the person after us will have a different view on success. Moreover, people compare different people performance to evaluate their success. But success is not something that you can copy from others. You have to make your own path to achieving success. In modern-day, people are obsessed with success because of the glamour and lifestyle of successful people.

What formulates a person successful?