

## Assignment -2

Assignment Date	26 September 2022
Student Name	V. Nithya Sri
Student Roll Number	311519205044
Maximum Marks	2 Marks

### Question-1:

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

The screenshot displays the IBM Db2 on Cloud web interface. The top navigation bar includes 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The 'Tables' tab is active, showing a list of tables in the 'MLD08411' schema. A table named 'USER' is selected. The 'Table definition' panel on the right shows the structure of the 'USER' table:

Name	Data type	Nullable	Length	Scale
ROLL_NO	VARCHAR	Y	30	0
EMAIL	VARCHAR	Y	50	0
USER_NAME	CHAR	Y	64	0
PASSWORD	VARCHAR	Y	64	0

Below the table definition, there is a 'View data' button. The interface also shows a search bar for schemas or tables and a 'Refresh' button.

- insert into user values ('nithyasri@gmail.com','Nithya Sri','04','d');
- insert into user values ('nanditha@gmail.com','Nanditha','03','c');
- insert into user values ('abi@gmail.com','Abirami','01','a');
- insert into user values ('dd@gmail.com','Divya','02','b');

PRJ41491.USER

EMAIL	USERNAME	ROLL_NUMBER	PASSWORD
abi@gmail.com	Abirami	01	a
dd@gmail.com	Divya	02	b
nanditha@gmail.com	Nanditha	03	c
nithyasri@gmail.com	Nithya Sri	04	d

## Question-2:

Perform UPDATE, DELETE Queries with user table

- UPDATE user SET email='divya@gmail.com' WHERE roll\_number='02';

Untitled - 1

```

1 UPDATE user;
2 SET email='divya@gmail.com';
3 WHERE roll_number='02';
4;
5;

```

Script	Date	Status	Runtime
Untitled - 1	Oct 5, 2022 4:27:43 PM	✓ 1	0.040 s
UPDATE user SET email='divya@gmail.com' WHERE roll_number='02'		✓	0.040 s

PRJ41491.USER

EMAIL	USERNAME	ROLL_NUMBER	PASSWORD
abi@gmail.com	Abirami	01	a
divya@gmail.com	Divya	02	b
nanditha@gmail.com	Nanditha	03	c
nithyasri@gmail.com	Nithya Sri	04	d

- DELETE FROM user WHERE roll\_number=04;

delete from user where roll\_number=04;

Script	Date	Status	Runtime
Untitled - 1	Oct 5, 2022 4:24:32 PM	✓ 1	0.020 s
delete from user where roll_number=04		✓	0.020 s

EMAIL	USERNAME	ROLL_NUMBER	PASSWORD
abi@gmail.com	Abirami	01	a
dd@gmail.com	Divya	02	b
nanditha@gmail.com	Nanditha	03	c

### Question 3:

Connect python code to db2

#### Program:

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

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

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

```
try:
```

```
    conn=ibm_db.connect("DATABASE=bludb;HOSTNAME=fbd88901-ebdb-4a4f-a32e-
9822b9fb237b.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32731;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=mld08411;PWD=mCn9EnGnLGGbg2JH","","")
```

```
except:
```

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

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

```
def dashboard():
```

```
    return "welcome"
```

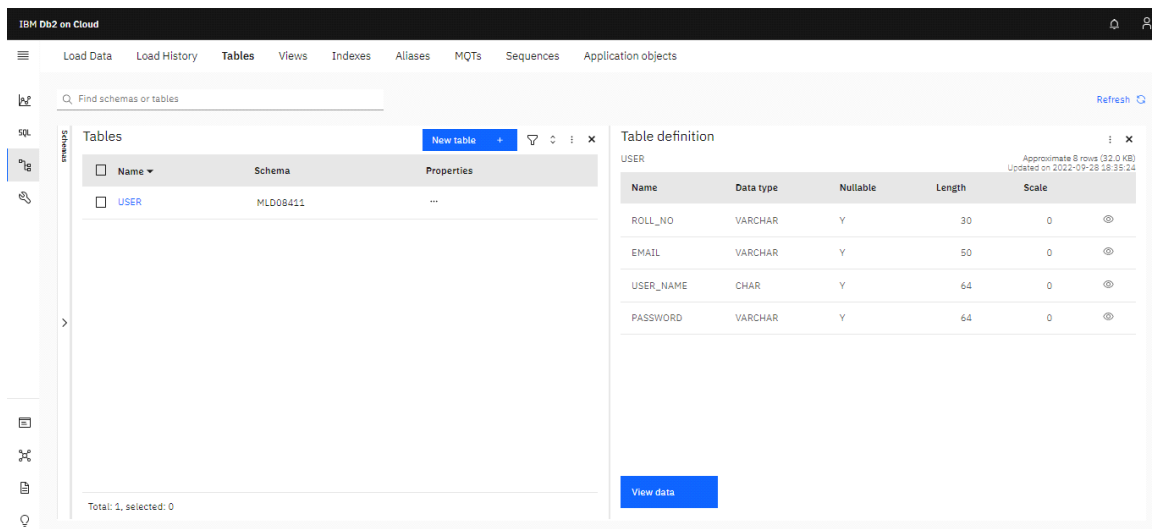
```
if __name__=='__main__':
```

```
    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 top navigation bar includes 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The 'Tables' tab is selected. A search bar at the top left says 'Find schemas or tables'. Below it, a table list shows one table named 'USER' in the 'MLD08411' schema. To the right, the 'Table definition' panel for the 'USER' table is displayed, showing its structure: ROLL\_NO (VARCHAR, 30, nullable), EMAIL (VARCHAR, 50, nullable), USER\_NAME (CHAR, 64, nullable), and PASSWORD (VARCHAR, 64, nullable). A 'View data' button is at the bottom of the definition panel.

Name	Data type	Nullable	Length	Scale
ROLL_NO	VARCHAR	Y	30	0
EMAIL	VARCHAR	Y	50	0
USER_NAME	CHAR	Y	64	0
PASSWORD	VARCHAR	Y	64	0

#### Program:

##### User.py

```
from flask import Flask, flash, render_template, request, redirect, url_for, session
import ibm_db
app=Flask(__name__)
app.secret_key='a'
try:
    conn=ibm_db.connect("DATABASE=bludb;HOSTNAME=fbd88901-ebdb-4a4f-a32e-
9822b9fb237b.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32731;SECURITY=SSL;SSLServe
rCertificate=DigiCertGlobalRootCA.crt;UID=mld08411;PWD=mCn9EnGnLGGbg2JH","","")
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_no=?"
        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,roll_number)
            ibm_db.bind_param(prepare_stmt,2,email)
            ibm_db.bind_param(prepare_stmt,3,username)
            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 user_name=? 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['USER_NAME']
    session["username"]=account["USER_NAME"]
    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"/>
    </form>

```

```
        </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>

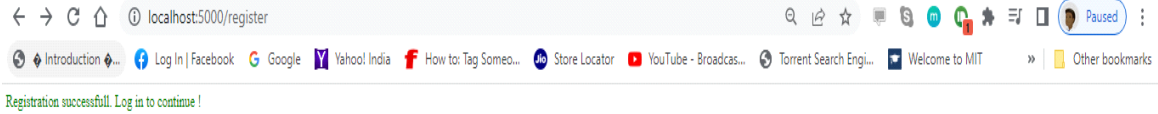
## style.css

```
.center{
margin: auto;
width: 15%;
}
h2{
text-align:center;
}
input{
border-radius:5px;
padding:7px;
}
```

## Output:

The image shows two screenshots. The top screenshot is a web browser displaying a 'Student Registration Portal' at localhost:5000. The form includes fields for Email ID (xyz@gmail.com), Username (xyz), Password (\*\*\*), and Roll number (23), with a submit button. The bottom screenshot shows the IBM Db2 on Cloud console at a specific database URL. The 'Tables' tab is selected, showing a table named 'MLD08411.USER'. The table has four columns: ROLL\_NO, EMAIL, USER\_NAME, and PASSWORD. The data rows are:

ROLL_NO	EMAIL	USER_NAME	PASSWORD
23	xyz@gmail.com	xyz	xyz
43	nanditha@gmail.com	Nanditha	nanditha
5044	nithyasri@gmail.com	Nithya Sri	nith



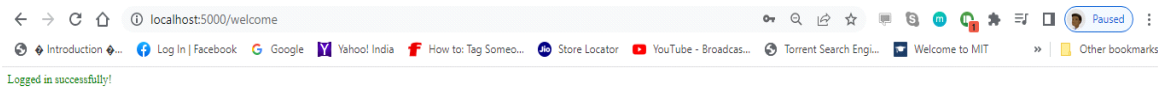
Login

Enter Username:

xyz

Enter Password:

submit



User xyz

*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.

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?**

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 like to do 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.