

Assignment -2

Assignment Date	26 September 2022
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Student Roll Number	311519205044
Maximum Marks	2 Marks

Question-1:

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

The screenshot shows the IBM Db2 on Cloud interface. The 'Tables' tab is selected, displaying a list of tables. The 'USER' table is highlighted. The 'Table definition' panel on the right shows the table structure:

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

- insert into user values(1,'abc@gmail.com','abc','abc123');
- insert into user values(15,'efg@gmail.com','efg','efg');
- insert into user values(26,'uvw@gmail.com','uvw','uv');
- insert into user values(9,'jkl@gmail.com','jkl','jkl');

The screenshot shows the IBM Db2 on Cloud interface displaying the data for the 'USER' table. The table has the following columns: ROLL_NO, EMAIL, USER_NAME, and PASSWORD. The data is as follows:

ROLL_NO	EMAIL	USER_NAME	PASSWORD
1	abc@gmail.com	abc	abc123
15	efg@gmail.com	efg	efg
23	xyz@gmail.com	xyz	xyz
26	uvw@gmail.com	uvw	uv

Question-2:

Perform UPDATE, DELETE Queries with user table

- update user set user_name='we'where email='uvw@gmail.com'

The screenshot shows the IBM Db2 on Cloud SQL editor interface. The left sidebar displays the 'Data objects' tab with a search filter 'Filter objects' and a list of objects including 'MLD08411'. The main editor area shows a script titled 'Untitled - 1' with the following SQL code:

```
1 update user
2 set user_name='we'
3 where email='uvw@gmail.com'
4
```

The 'Run all' button is visible in the top right of the editor. Below the editor, the 'History' tab shows the execution history of the script:

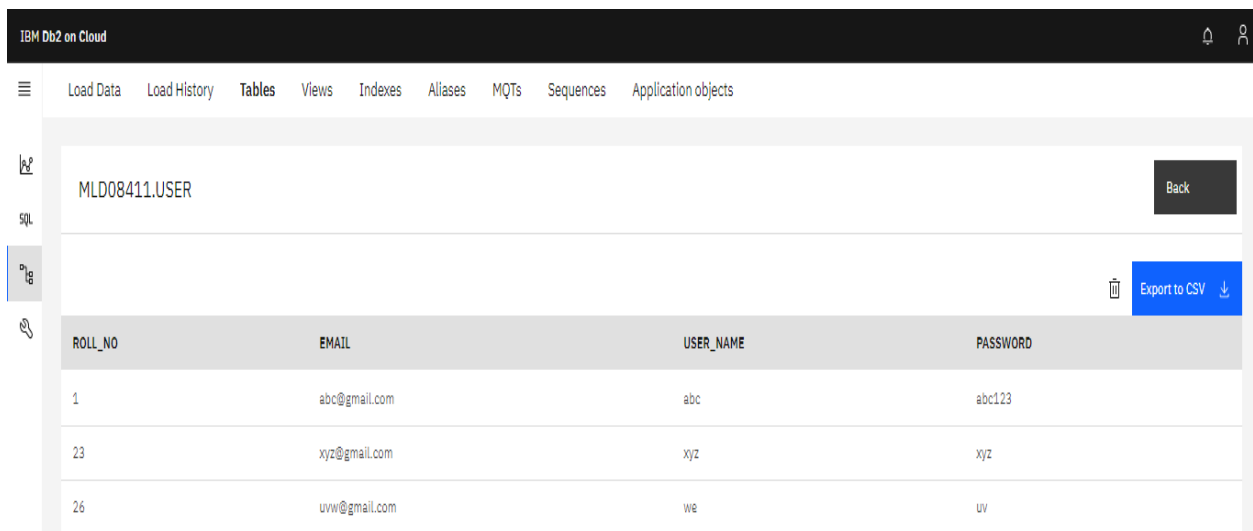
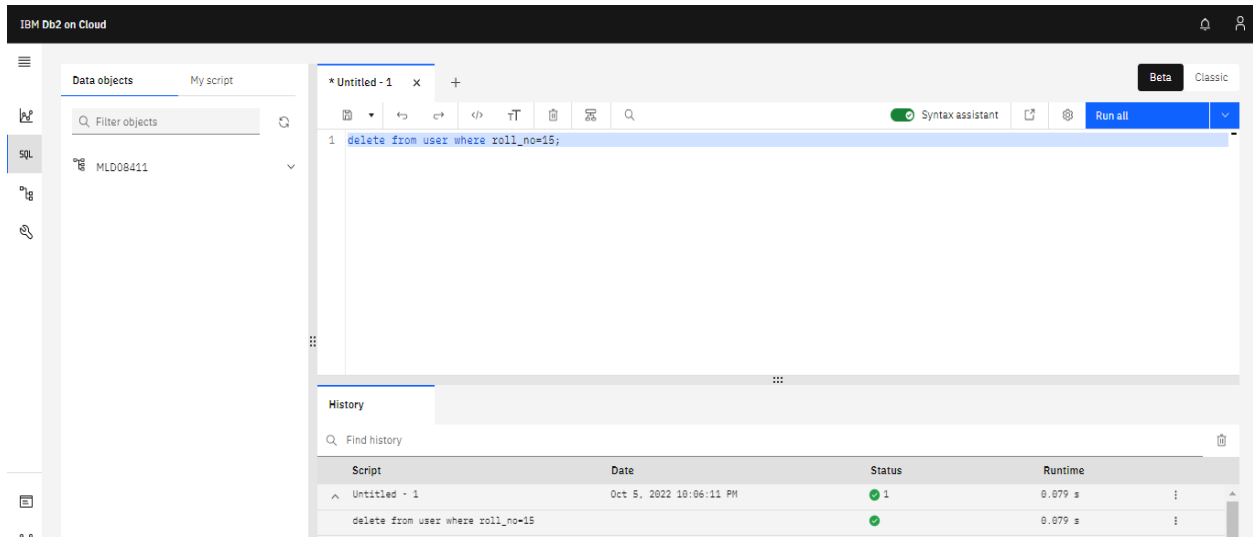
Script	Date	Status	Runtime
Untitled - 1	Oct 5, 2022 10:02:05 PM	✓ 1	0.019 s
update user set user_name='we'where email='uvw@gmail.com'		✓	0.019 s

The screenshot shows the IBM Db2 on Cloud SQL table view for the 'MLD08411.USER' table. The table has four columns: 'ROLL_NO', 'EMAIL', 'USER_NAME', and 'PASSWORD'. The data is as follows:

ROLL_NO	EMAIL	USER_NAME	PASSWORD
1	abc@gmail.com	abc	abc123
15	efg@gmail.com	efg	efg
23	xyz@gmail.com	xyz	xyz
26	uvw@gmail.com	we	uv

The 'Export to CSV' button is visible in the top right of the table view.

- delete from user where roll_no=15;



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;SSLServe
rCertificate=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 'Tables' tab is selected, and the 'USER' table is highlighted. The table definition is shown on the right, with columns: ROLL_NO (VARCHAR, 30), EMAIL (VARCHAR, 50), USER_NAME (CHAR, 64), and PASSWORD (VARCHAR, 64). All columns are nullable (Y) and have a scale of 0.

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 successful. 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"/>
      <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 />

```


<p><i>As long as you keep yourself focused, you will have a mighty mind that can make everything possible.</i></h3>

</center>

<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.

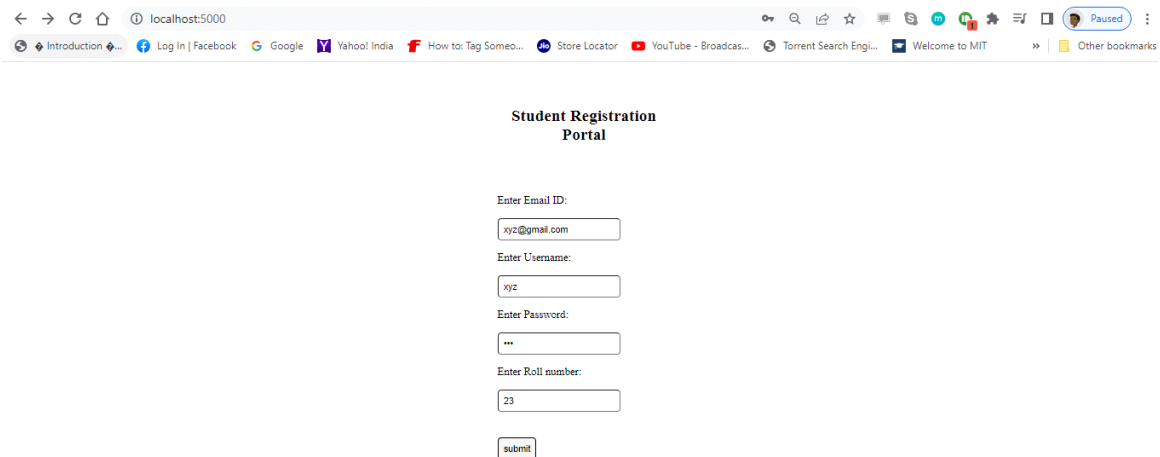
If you look in the dictionary for the meaning of the word success then you will find that it means the achievement of one's goal or aim. So, basically, anyone can achieve success by simply achieving their aim or goal.</p>

```
</div>
</body>
</html>
```

style.css

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

Output:



The screenshot shows a web browser window with the address bar displaying 'localhost:5000'. The browser's bookmark bar includes links to 'Introduction', 'Log In | Facebook', 'Google', 'Yahoo! India', 'How to: Tag Someo...', 'Store Locator', 'YouTube - Broadcas...', 'Torrent Search Engi...', 'Welcome to MIT', and 'Other bookmarks'. The main content area of the browser displays a registration form titled 'Student Registration Portal'. The form consists of the following elements:

- A label 'Enter Email ID:' followed by a text input field containing 'xyz@gmail.com'.
- A label 'Enter Username:' followed by a text input field containing 'xyz'.
- A label 'Enter Password:' followed by a password input field with three asterisks '***'.
- A label 'Enter Roll number:' followed by a text input field containing '23'.
- A 'submit' button located below the roll number field.

localhost:5000/register

Enter Username:

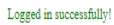
Enter Username:

xyz

Enter Password:

444

submit



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

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.

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 want they like to do not what that others told them to do. Successful people do what they like to do also they think 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.