

Assignment -2

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
EMAIL	VARCHAR	Y	32	0
USERNAME	VARCHAR	Y	32	0
ROLL_NUMBER	VARCHAR	Y	32	0
PASSWORD	VARCHAR	Y	32	0

- insert into user values(2,'abc','abc@gmail.com','abc');
- insert into user values(5,'fgh','fgh@gmail.com','fgh');

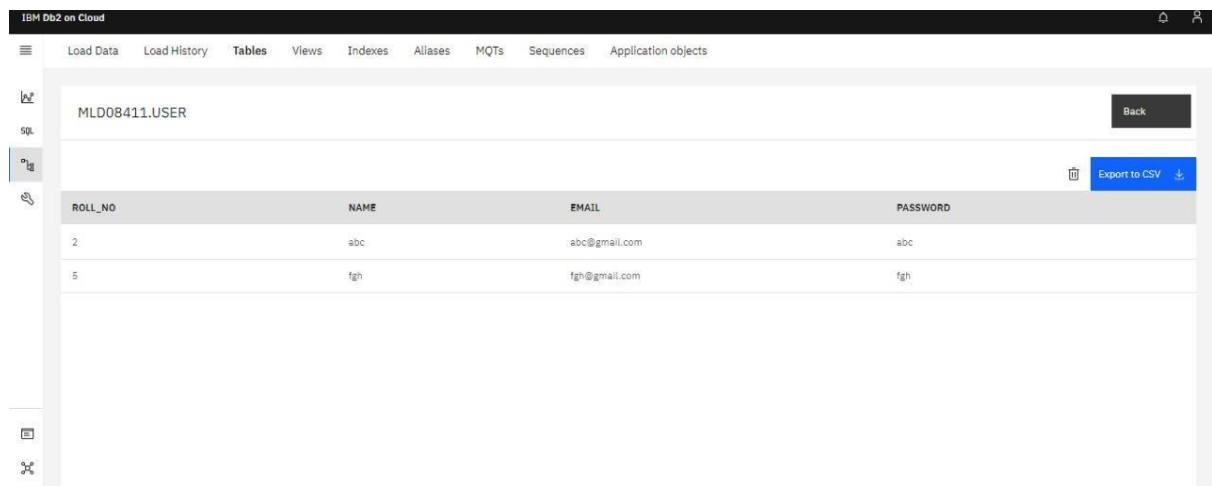
The screenshot shows the IBM Db2 on Cloud interface displaying the data for the 'USER' table. The table has the following columns: ROLL_NO, NAME, EMAIL, and PASSWORD. The data is as follows:

ROLL_NO	NAME	EMAIL	PASSWORD
2	abc	abc@gmail.com	abc
5	fgh	fgh@gmail.com	fgh

Question-2:

Perform UPDATE, DELETE Queries with user table

update user set password='fg' where name='fgh';



IBM Db2 on Cloud

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

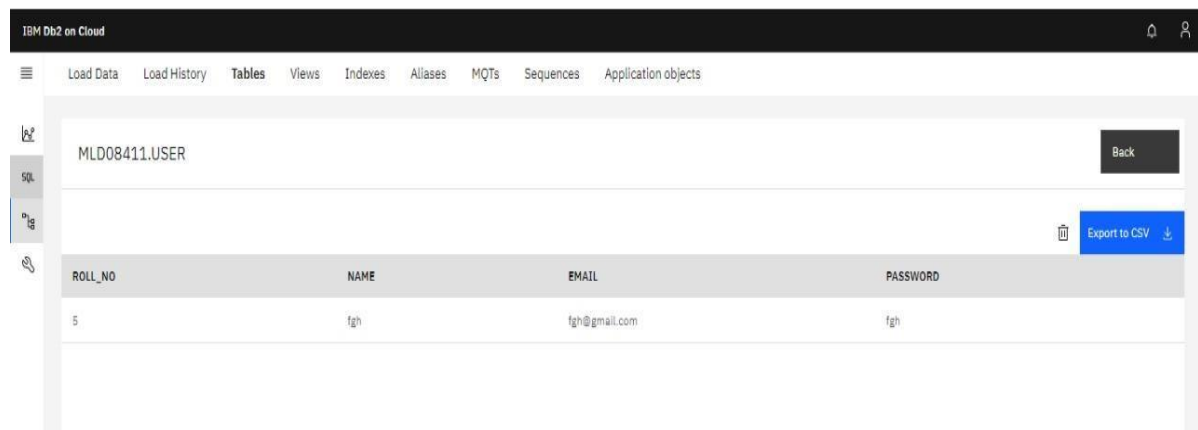
MLD08411.USER

Back

Export to CSV

ROLL_NO	NAME	EMAIL	PASSWORD
2	abc	abc@gmail.com	abc
5	fgh	fgh@gmail.com	fgh

delete from user where roll_no=2;



IBM Db2 on Cloud

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

MLD08411.USER

Back

Export to CSV

ROLL_NO	NAME	EMAIL	PASSWORD
5	fgh	fgh@gmail.com	fgh

Question 3:

Connect python code to db2

Program:

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

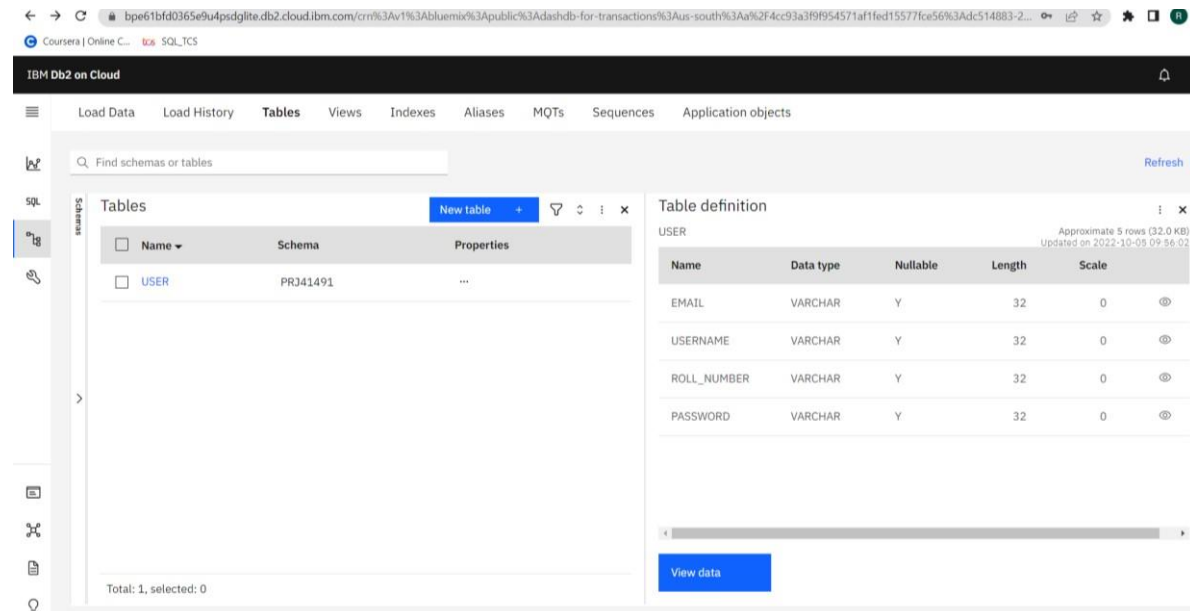
```
app=Flask(__name__) try:
    conn=ibm_db.connect("DATABASE=bludb;HOSTNAME=6667d8e9-9d4d-4ccb-ba32-
21da3bb5aafc.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=30376;SECURITY=SSL;SSLSe
rverCertificate=DigiCertGlobalRootCA.crt;UID=prj41491;PWD=8NNe2bnsXzveXAcg", "", "") except:
    print("Unable 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 'Tables' tab is selected, and a table named 'USER' is highlighted. The table definition is shown on the right, with columns: EMAIL, USERNAME, ROLL_NUMBER, and PASSWORD, all of type VARCHAR with a length of 32 and a scale of 0. The table is located in the schema 'PRJ41491'.

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

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;SSLSe
rverCertificate=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>

    <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
  wellrounded 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

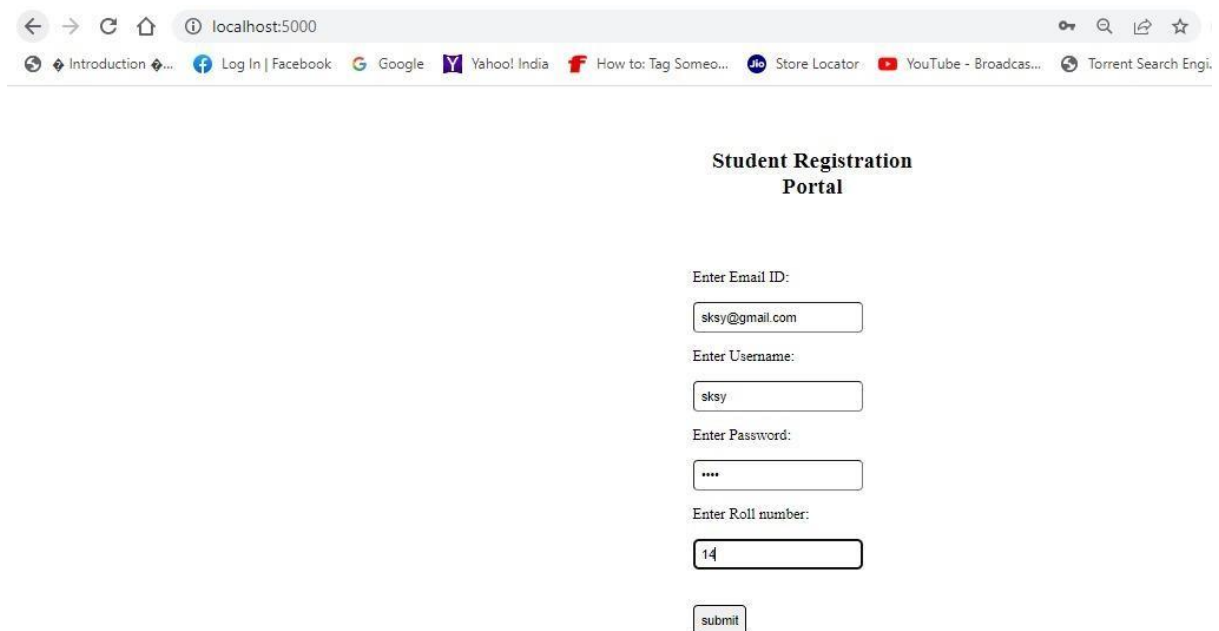
```

.center{ margin:
auto; width:
15%;
}
h2{ text-align:center;
}

```

```
input{ border-radius:5px;
padding:7px;
}
```

Output:



Student Registration Portal

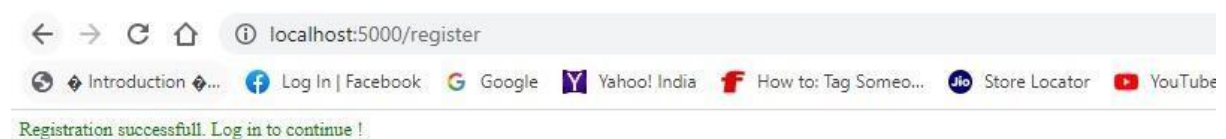
Enter Email ID:

Enter Username:

Enter Password:

Enter Roll number:

submit



Registration successfull. Log in to continue !

Student Registration Portal

Enter Username:

Enter Password:

submit



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?