

Python Assignment-1

Date	30 September 2022
Team ID	PNT2022TMID28022
Project Name	Inventory Management System For Retailers
Maximum Marks	2 Marks

Question-1:

Create a 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 'INVENTORY' table is highlighted. The 'Table definition' panel on the right shows the table's structure:

Name	Data type	Nullable	Length	Scale
EMAIL	VARCHAR	Y	32	0
USERNAME	VARCHAR	Y	32	0
ROLL_NO	VARCHAR	Y	32	0
PASSWORD	VARCHAR	Y	11	0

The screenshot shows the IBM Db2 on Cloud interface with the SQL editor open. The editor contains the following SQL statement:

```
1 insert into inventory values('abisharu1810@gmail.com','Saranya','01','a');
2 insert into inventory values('aksh1311ita@gmail.com','Akshita','02','b');
3 insert into inventory values('deekshanaarun@gmail.com','Deekshana','03','c');
4 insert into inventory values('ilavarasi4it@gmail.com','Ilavarasi','04','d');
5
6
```

IBM Db2 on Cloud			
<div> <div>Load Data</div> <div>Load History</div> <div>Tables</div> <div>Views</div> <div>Indexes</div> <div>Aliases</div> <div>MQTs</div> <div>Sequences</div> <div>Application objects</div> </div>			
SSL72306.INVENTORY			
<div> <div>Export to CSV</div> </div>			
EMAIL	USERNAME	ROLL_NO	PASSWORD
abisharu1810@gmail.com	Saranya	01	a
aksh1311ita@gmail.com	Akshita	02	b
deekshanaarun@gmail.com	Deekshana	03	c
ilavarasi4it@gmail.com	Ilavarasi	04	d

Question-2:

Perform UPDATE, DELETE Queries with user table

1. UPDATE

IBM Db2 on Cloud															
<div> <div>Data objects</div> <div>My script</div> </div>															
<div> <div>Filter objects</div> <div>SSL72306</div> </div>															
<div> <div> <div>Untitled - 1</div> <div>Template - ...</div> </div> <div> <div> <div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> </div> <div> <div>UPDATE inventory</div> <div>SET UserName='Saran_18'</div> <div>WHERE Roll_No='01';</div> </div> </div> </div>															
<div> <div>History</div> <div>Find history</div> <table> <tr> <th>Script</th><th>Date</th><th>Status</th><th>Runtime</th></tr> <tr> <td>Template - Update Statement</td><td>Oct 10, 2022 10:22:56 PM</td><td>1</td><td>0.020 s</td></tr> <tr> <td>UPDATE inventory SET UserName='Saran_18' WHERE Roll_No='01'</td><td></td><td></td><td>0.020 s</td></tr> </table> </div>				Script	Date	Status	Runtime	Template - Update Statement	Oct 10, 2022 10:22:56 PM	1	0.020 s	UPDATE inventory SET UserName='Saran_18' WHERE Roll_No='01'			0.020 s
Script	Date	Status	Runtime												
Template - Update Statement	Oct 10, 2022 10:22:56 PM	1	0.020 s												
UPDATE inventory SET UserName='Saran_18' WHERE Roll_No='01'			0.020 s												

IBM Db2 on Cloud			
<div> <div>Load Data</div> <div>Load History</div> <div>Tables</div> <div>Views</div> <div>Indexes</div> <div>Aliases</div> <div>MQTs</div> <div>Sequences</div> <div>Application objects</div> </div>			
SSL72306.INVENTORY			
<div> <div>Export to CSV</div> </div>			
EMAIL	USERNAME	ROLL_NO	PASSWORD
abisharu1810@gmail.com	Saran_18	01	a
aksh1311ita@gmail.com	Akshita	02	b
deekshanaarun@gmail.com	Deekshana	03	c
ilavarasi4it@gmail.com	Ilavarasi	04	d

2. DELETE

The top screenshot shows the IBM Db2 on Cloud interface. The left sidebar has a 'Data objects' tab with a search bar and a list of objects including 'SSL72306'. The main editor area shows a SQL script with the following statement:

```
DELETE from inventory where Roll_No='04';
```

The bottom panel shows a 'History' table with the following data:

Script	Date	Status	Runtime
Template - Update Statement	Oct 10, 2022 10:19:20 PM	1	0.008 s
DELETE from inventory where Roll_No='04'			0.008 s

The bottom screenshot shows the IBM Db2 on Cloud interface with the 'Tables' tab selected. The table 'SSL72306.INVENTORY' is displayed with the following data:

EMAIL	USERNAME	ROLL_NO	PASSWORD
abisharu1810@gmail.com	saranya	01	a
aksh1311ita@gmail.com	Akshita	02	b
deekshanaarun@gmail.com	Deekshana	03	c

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;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=prj41491;PWD=8NNe2bnsXzveXAcg","","")
```

```
except:
```

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

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

```
def dashboard():
```

```
    return "welcome"
```

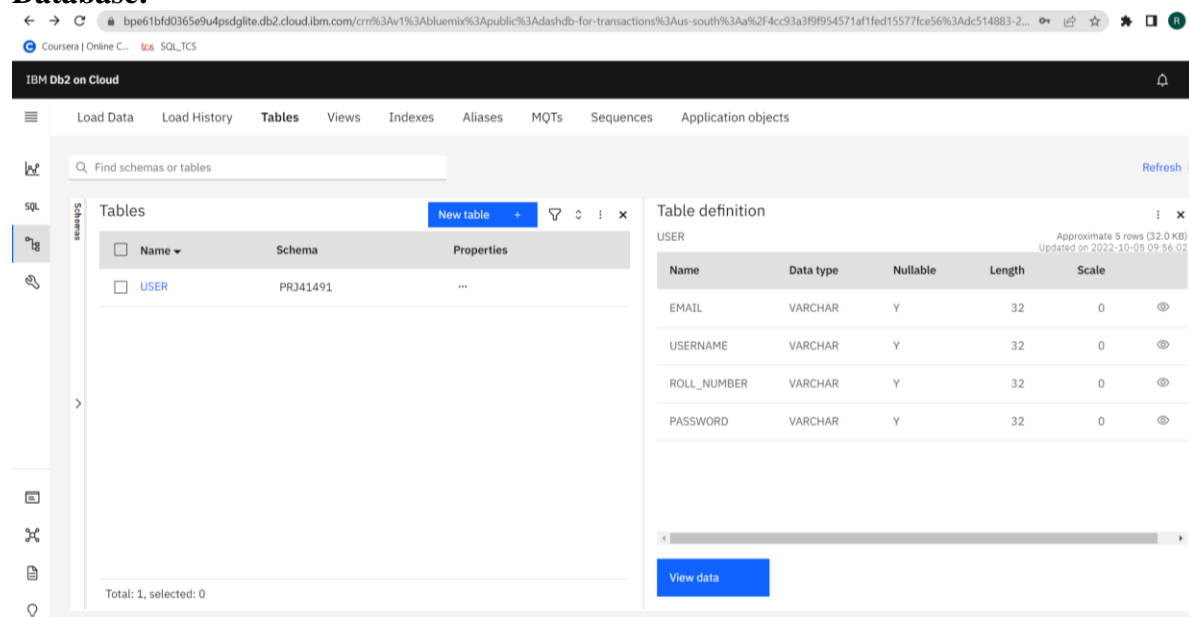
```
if __name__=='__main__':
```

```
    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 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 for 'Find schemas or tables' is present. Below the search bar, a table lists the available tables. The table has columns 'Name', 'Schema', and 'Properties'. One table is listed: 'USER' in schema 'PRJ41491'. To the right of the table list, a 'Table definition' panel is open for the 'USER' table. It shows the table structure with columns: 'EMAIL', 'USERNAME', 'ROLL_NUMBER', and 'PASSWORD'. Each column is of type 'VARCHAR' with a length of 32 and is nullable. The 'View data' button is at the bottom of the table definition panel.

Name	Schema	Properties
USER	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;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.

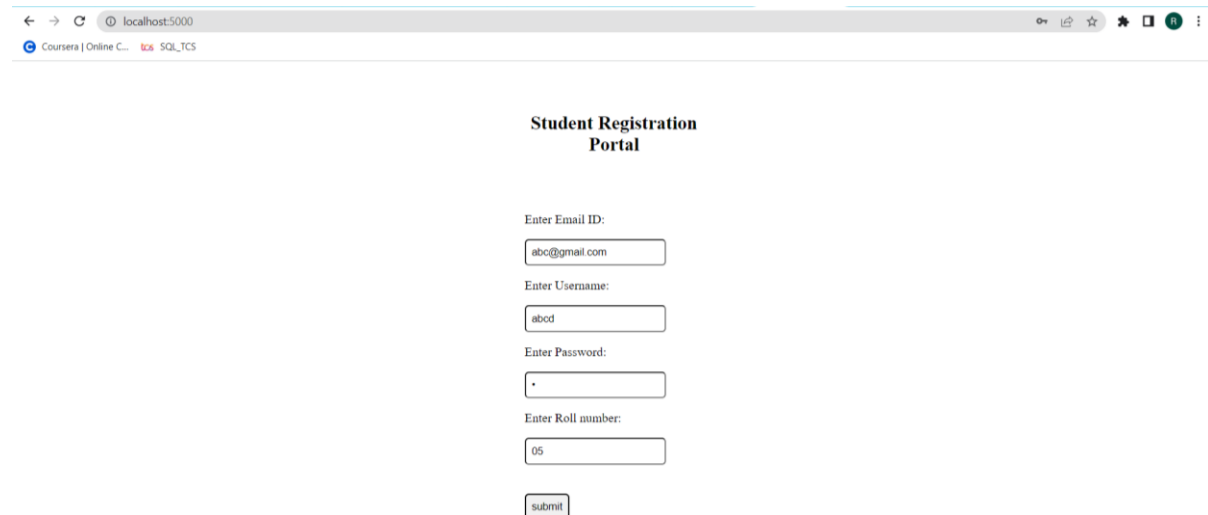
If you look in the dictionary for the meaning of the word success then you will find that it means the achievement of one's goal or aim. So, basically, anyone can achieve success by simply achieving their aim or goal.</p>

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

style.css

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

Output:



The screenshot shows a web browser window with the address bar displaying 'localhost:5000'. The page title is 'Coursers | Online C...' and the URL is 'SQL_TCS'. The main content of the page is a 'Student Registration Portal' form. The form consists of the following elements:

- Student Registration Portal** (Section Header)
- Enter Email ID:** A text input field containing 'abc@gmail.com'.
- Enter Username:** A text input field containing 'abod'.
- Enter Password:** A text input field containing a single asterisk (*) character.
- Enter Roll number:** A text input field containing '05'.
- submit** (Submit Button)

IBM Db2 on Cloud

Load DataLoad HistoryTablesViewsIndexesAliasesMQTsSequencesApplication objects

PRJ41491.USER

Back

Export to CSV

EMAIL	USERNAME	ROLL_NUMBER	PASSWORD
abc@gmail.com	abcd	05	a
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

localhost:5000/register

Coursera | Online C...SQL_TCS

Registration successful. Log in to continue !

Login

Enter Username:

abcd

Enter Password:

1

submit

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?