

Assignment -2

Assignment Date	19 September 2022
Student Name	Sriram M
Student Roll Number	8204191040302
Maximum Marks	2 Marks

Question-1:

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

The screenshot shows the IBM Db2 on Cloud console interface. The 'Schemas' panel on the left lists a schema named 'VSC20823' of type 'User'. The 'Tables' panel on the right shows a table named 'PLASMADONOR' within the 'VSC20823' schema. The interface includes a search bar, navigation tabs (Load Data, Load History, Tables, Views, Indexes, Aliases, MQTs, Sequences, Application objects), and a sidebar with icons for various database operations.

The screenshot shows the 'Table definition' panel for the 'PLASMADONOR' table. The table has the following columns:

Name	Data type	Nullable	Length	Scale
NAME	VARCHAR	Y	32	0
MAIL	VARCHAR	Y	32	0
PHONE	VARCHAR	Y	32	0
CITY	VARCHAR	Y	32	0
COVIDINFECTIONSTATUS	VARCHAR	Y	32	0
BLOODGROUP	VARCHAR	Y	32	0

The interface also includes a 'View data' button and a 'Total: 1, selected: 1' status bar.

Question-2:

Perform UPDATE,DELETE Queries with user table

Solution:

insert into plasmadonor

values('caitlin','caitlin33@gmail.com','7778889997','Washington','uninfected','O negative','12345');

insert into plasmadonor values('joe','joe33@gmail.com','7778889998','Washington','uninfected','B negative','12346');

insert into plasmadonor values('barry','barry33@gmail.com','7778889999','Washington','infected','A negative','12349');

update plasmadonor set phone = '777666555' where name = 'barry';

delete from plasmadonor where name = 'joe';

The screenshot displays the IBM Db2 on Cloud web interface. The top section shows a SQL script editor with the following code:

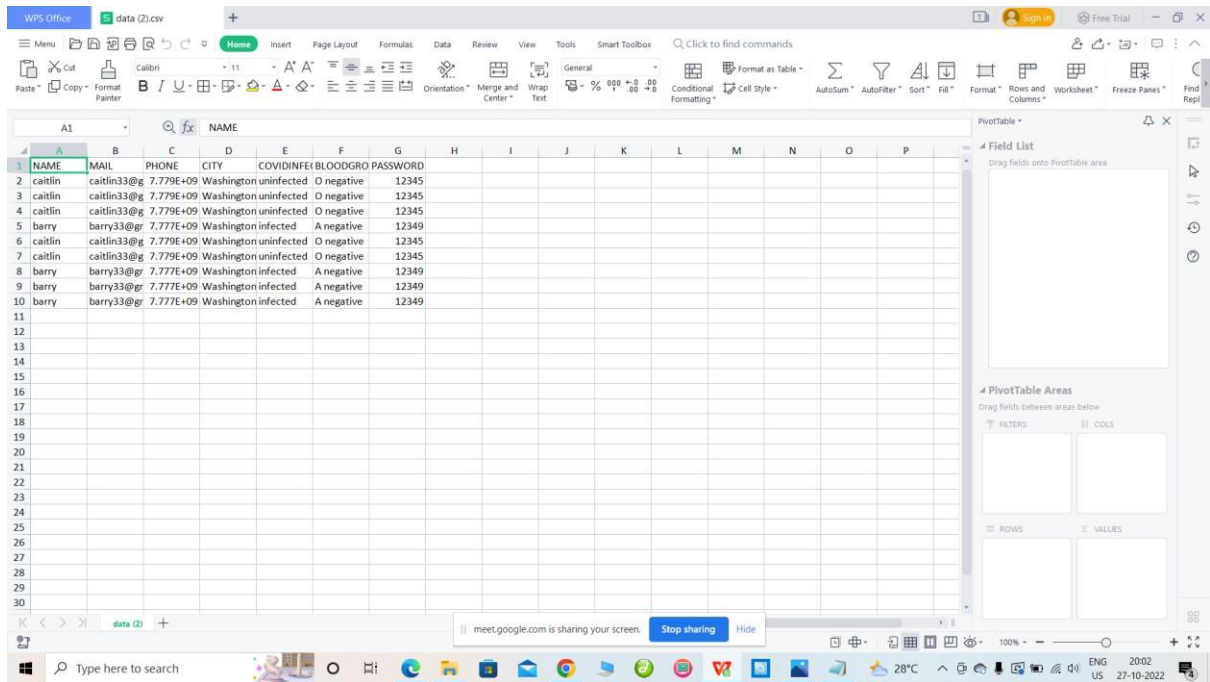
```
1 insert into plasmadonor values('caitlin','caitlin33@gmail.com','7778889997','Washington','uninfected','O negative','12345');
2 insert into plasmadonor values('joe','joe33@gmail.com','7778889998','Washington','uninfected','B negative','12346');
3 insert into plasmadonor values('barry','barry33@gmail.com','7778889999','Washington','infected','A negative','12349');
4 update plasmadonor set phone = '777666555' where name = 'barry';
5 delete from plasmadonor where name = 'joe';
6
```

Below the script editor, the 'History' tab shows the execution results:

Script	Date	Status	Runtime
Untitled - 1	Oct 27, 2022 9:53:13 PM	Success	0.026 s
insert into plasmadonor values('caitlin','caitlin33@gmail.com','7778889997','W...		Success	0.007 s
insert into plasmadonor values('joe','joe33@gmail.com','7778889998','Washingto...		Success	0.005 s
insert into plasmadonor values('barry','barry33@gmail.com','7778889999','Washi...		Success	0.005 s
update plasmadonor set phone = '777666555' where name = 'barry'		Success	0.004 s
delete from plasmadonor where name = 'joe'		Success	0.005 s

The bottom section shows the 'VSC20823.PLASMADONOR' table with the following data:

NAME	MAIL	PHONE	CITY	COVIDINFECTIONSTATUS	BLOODGROUP	PASSWORD
barry	barry33@gmail.com	777666555	Washington	infected	A negative	12349
barry	barry33@gmail.com	777666555	Washington	infected	A negative	12349
barry	barry33@gmail.com	777666555	Washington	infected	A negative	12349
barry	barry33@gmail.com	777666555	Washington	infected	A negative	12349
barry	barry33@gmail.com	777666555	Washington	infected	A negative	12349
barry	barry33@gmail.com	777666555	Washington	infected	A negative	12349
caitlin	caitlin33@gmail.com	7778889997	Washington	uninfected	O negative	12345
caitlin	caitlin33@gmail.com	7778889997	Washington	uninfected	O negative	12345
caitlin	caitlin33@gmail.com	7778889997	Washington	uninfected	O negative	12345



Question-3:

Connect python code to db2.

Solution:

```
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=3883e7e4-18f5-4afe-be8c-fa31c41761d2.bs2io90l08kqb1od8lcg.databases.appdomain.cloud;PORT=31498;SECURITY=SSL;SSL ServerCertificate=DigiCertGlobalRootCA.crt;UID=sch83401;PWD=j7QZUHGAUGbPhns","")
```

WPS Office - data (1).csv

Menu File Insert Page Layout Formulas Data Review View Tools Smart Toolbox

Click to find commands

Paste Cut Copy Format Painter B I U Bold Italic Underline Font Color Background Color Conditional Formatting AutoSum Autofilter Sort Fill Rows and Columns Worksheet Freeze Panes Find Replace

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	NAME	MAIL	PHONE	CITY	COVIDINFE	BLOODGRO	PASSWORD								
2	cailin	cailin33@gmail.com	7778889997	Washington	uninfected	O negative	12345								
3															
4															
5															
6															
7															
8															
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PivotTable

Field List
Drag fields onto PivotTable area

PivotTable Areas
Drag fields between areas below

FILTERS COLUMNS ROWS VALUES

meet.google.com is sharing your screen. Stop sharing Hide

Type here to search

ENG US 2002 27-10-2022

VSC20823.PLASMADONOR

Back

Export to CSV

NAME	MAIL	PHONE	CITY	COVIDINFECTIONSTATUS	BLOODGROUP	PASSWORD
caitlin	caitlin33@gmail.com	7778889997	Washington	uninfected	O negative	12345

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

Solution:

register.html

```
<!DOCTYPE html>
<html >
<!--From https://codepen.io/frytyler/pen/EGdtg-->
<head>
  <meta charset="UTF-8">
  <title>Plasma Donor App</title>
  <link href='https://fonts.googleapis.com/css?family=Pacifico' rel='stylesheet'
type='text/css'>
  <link href='https://fonts.googleapis.com/css?family=Arimo' rel='stylesheet'
type='text/css'>
  <link href='https://fonts.googleapis.com/css?family=Hind:300' rel='stylesheet'
type='text/css'>
  <link href='https://fonts.googleapis.com/css?family=Open+Sans+Condensed:300'
rel='stylesheet' type='text/css'>
  <link rel="stylesheet" href="{{ url_for('static', filename='style1.css') }}">
  <link rel="stylesheet" href="style.css">

<style>
.login{
top: 20%;
}
```

```

</style>
</head>

<body>
<div class="header">
<div>Plasma Donor App</div>
    <ul>
    <li><a class="active" href="/login">Home</a></li>
    </ul>
</div>
<div class="login">
    <!-- Main Input For Receiving Query to our ML -->
    <form action="{{ url_for('register')}}" method="post">
        <input type="text" name="name" placeholder="Enter Your Name" required="required"
style="color:black"/>
        <input type="email" name="email" placeholder="Enter Email" required="required"
style="color:black"/>
        <input type="text" name="phone" placeholder="Enter 10-digit mobile number"
required="required" style="color:black"/>
        <input type="city" name="city" placeholder="Enter Your City Name" required="required"
style="color:black"/>
        <select name="infect">

            <option value="select" selected>Select COVID infection status</option><option
value="infected">Infected</option>
            <option value="uninfected">Uninfected</option>
        </select>
        <select name="blood">
<option value="select" selected>Choose your blood group</option>
            <option value="O Positive">O Positive</option>
            <option value="A Positive">A Positive</option>
            <option value="B Positive">B Positive</option>
            <option value="AB Positive">AB Positive</option>
            <option value="O Negative">O Negative</option>
            <option value="A Negative">A Negative</option>
            <option value="B Negative">B Negative</option>
            <option value="AB Negative">AB Negative</option>
        </select>
        <input type="password" name="passw" placeholder="Enter Password" required="required"
style="color:black"/>
        <button type="submit" class="btn btn-primary btn-block btn-large">Register</button>
    </form>
    <br><br>
<div style="color:black">
    {{ pred }}</div>
</div>

```

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

login.html

```
<!DOCTYPE html>
<html >
<!--From https://codepen.io/frytyler/pen/EGdtg-->
<head>
  <meta charset="UTF-8">
  <title>Plasma Donor App</title>
  <link href='https://fonts.googleapis.com/css?family=Pacifico' rel='stylesheet'
type='text/css'>
  <link href='https://fonts.googleapis.com/css?family=Arimo' rel='stylesheet'
type='text/css'>
  <link href='https://fonts.googleapis.com/css?family=Hind:300' rel='stylesheet'
type='text/css'>
  <link href='https://fonts.googleapis.com/css?family=Open+Sans+Condensed:300'
rel='stylesheet' type='text/css'>
  <link rel="stylesheet" href="{{ url_for('static', filename='style1.css') }}">
  <link rel="stylesheet" href="style.css">

<style>
.login{
top: 20%;
}
</style>
</head>

<body>
<div class="header">
<div>Plasma Donor App</div>
  <ul>

    <li><a href="/registration">Register</a></li>
    <li><a class="active" href="/login">Home</a></li>

  </ul>
</div>
<div class="login" >
  <div>

  </div>

  <!-- Main Input For Receiving Query to our ML -->
```

```

<form action="{{ url_for('loginpage')}}"method="post">
    <input type="text" name="user" placeholder="Enter UserName" required="required"
style="color:black" />
    <input type="password" name="passw" placeholder="Enter Password" required="required"
style="color:black" />
    <button type="submit" class="btn btn-primary btn-block btn-large">Login</button>

</form>
<br><br>
<div style="color :black">
{{ pred }}</div>
</div>

</body>
</html>

```

style.css

```

@import url(https://fonts.googleapis.com/css?family=Open+Sans);
.btn {
    display: inline-block;
    *display: inline;
    *zoom: 1; padding:
4px 10px 4px;
margin-bottom: 0;
font-size: 13px;
line-height: 18px;
color: #333333;
text-align: center;
text-shadow: 0 1px 1px rgba(255, 255, 255, 0.75);
vertical-align: middle;
background-color: #f5f5f5;
background-image: -moz-linear-gradient(top, #ffffff, #e6e6e6);
background-image: -ms-linear-gradient(top, #ffffff, #e6e6e6);
background-image: -webkit-gradient(linear, 0 0, 0 100%, from(#ffffff), to(#e6e6e6));
background-image: -webkit-linear-gradient(top, #ffffff, #e6e6e6);
background-image: -o-linear-gradient(top, #ffffff, #e6e6e6);
background-image: linear-gradient(top, #ffffff, #e6e6e6);
background-repeat: repeat-x;
filter: progid:dximagetransform.microsoft.gradient(startColorstr=#ffffff,
endColorstr=#e6e6e6, GradientType=0);
border-color: #e6e6e6 #e6e6e6 #e6e6e6;
border-color: rgba(0, 0, 0, 0.1) rgba(0, 0, 0, 0.1) rgba(0, 0, 0, 0.25);
border: 1px solid #e6e6e6;
-webkit-border-radius: 4px;

```



```
-moz-border-radius: 4px;
border-radius: 4px;
-webkit-box-shadow: inset 0 1px 0 rgba(255, 255, 255, 0.2), 0 1px 2px rgba(0, 0, 0, 0.05);
-moz-box-shadow: inset 0 1px 0 rgba(255, 255, 255, 0.2), 0 1px 2px rgba(0, 0, 0, 0.05);
box-shadow: inset 0 1px 0 rgba(255, 255, 255, 0.2), 0 1px 2px rgba(0, 0, 0, 0.05);
cursor: pointer; *margin-left: .3em;
}
```

```
.btn:hover, .btn:active, .btn.active, .btn.disabled, .btn[disabled] { background-color: #e6e6e6; }
```

```
.btn-large {
    padding: 9px 14px;
    font-size: 15px;
    line-height: normal;
    -webkit-border-radius: 5px;
    -moz-border-radius: 5px;
    border-radius: 5px;
}
```

```
.btn:hover {
    color: #333333;
    text-decoration: none;
    background-color: #e6e6e6;
    background-position: 0 -15px;
    -webkit-transition: background-position 0.1s linear;
    -moz-transition: background-position 0.1s linear;
    -ms-transition: background-position 0.1s linear;
    -o-transition: background-position 0.1s linear;
    transition: background-position 0.1s linear;
}
```

```
.btn-primary, .btn-primary:hover {
    text-shadow: 0 -1px 0 rgba(0, 0, 0, 0.25);
    color: #ffffff;
}
```

```
.btn-primary.active { color: rgba(255, 255, 255, 0.75); }
```

```
.btn-primary {
    background-color: #4a77d4;
    background-image: -moz-linear-gradient(top, #6eb6de, #4a77d4);
    background-image: -ms-linear-gradient(top, #6eb6de, #4a77d4);
    background-image: -webkit-gradient(linear, 0 0, 0 100%, from(#6eb6de), to(#4a77d4));
    background-image: -webkit-linear-gradient(top, #6eb6de, #4a77d4);
    background-image: -o-linear-gradient(top, #6eb6de, #4a77d4);
    background-image: linear-gradient(top, #6eb6de, #4a77d4);
}
```

```

        background-repeat: repeat-x;
        filter: progid:dximagetransform.microsoft.gradient(startColorstr=#6eb6de,
endColorstr=#4a77d4, GradientType=0);
        border: 1px solid #3762bc;
        text-shadow: 1px 1px 1px rgba(0,0,0,0.4);
        box-shadow: inset 0 1px 0 rgba(255, 255, 255, 0.2), 0 1px 2px rgba(0, 0, 0, 0.5);
    }

.btn-primary:hover, .btn-primary:active, .btn-primary.active, .btn-primary.disabled, .btn-
primary[disabled] {
    filter: none;
    background-color: #4a77d4;
}

.btn-block { width: 100%; display:block; }

* { -webkit-box-sizing:border-box; -moz-box-sizing:border-box; -ms-box-sizing:border-box; -o-box-
sizing:border-box; box-sizing:border-box; }

html { width: 100%; height:100%; overflow:hidden; }

body {
    width: 100%;
    height:100%;
    font-family: 'Open Sans', sans-serif;
    background: #ffffff;
    color: #000000;

    font-size: 18px;
    text-align:center;
    letter-spacing:1.2px;

}

.header {
    top:0;
    margin:0px;
    left: 0px;
    right: 0px;
    position: fixed;
    background: #4a77d4;
    color: white;
    box-shadow: 0px 8px 4px grey;
    overflow: hidden;
    padding: 15px;
    font-size: 1.5vw;

```

```
        width: 100%;
        text-align: center;
    }
    .login {
        position: absolute;
        top: 70%;
        left: 50%;
        margin: -25px 0 0 -150px;
        width: 400px;
        height: 400px;
    }

    .header div { color: #fff; text-shadow: 0 0 10px rgba(0,0,0,0.3); letter-spacing: 1px; text-align: center; float: left; padding-left: 150px;}

    ul {
        list-style-type: none;
        margin: 0;
        padding: 0;
        padding-right: 150px;
        overflow: hidden;
    }

    li {
        float: right;
    }

    li a {
        display: block;
        color: white;
        text-align: center;
        padding: 0px 15px;
        text-decoration: none;
    }

    input {
        width: 100%;
        margin-bottom: 10px;
        background: rgba(255,255,255,255);
        border: none;
        outline: none;
        padding: 10px;
        font-size: 13px;
        color: black;
    }
}
```

```

    text-shadow: black;
    border: 1px solid rgba(0,0,0,0.3);
    border-radius: 4px;
    box-shadow: inset 0 -5px 45px rgba(100,100,100,0.2), 0 1px 1px rgba(255,255,255,0.2);
    -webkit-transition: box-shadow .5s ease;
    -moz-transition: box-shadow .5s ease;
    -o-transition: box-shadow .5s ease;
    -ms-transition: box-shadow .5s ease;
    transition: box-shadow .5s ease;
}
input:focus { box-shadow: inset 0 -5px 45px rgba(100,100,100,0.4), 0 1px 1px
rgba(255,255,255,0.2); }

```

```

select {
    width: 100%;
    margin-bottom: 10px;
    background: rgba(255,255,255,255);
    border: none;
    outline: none;
    padding: 10px;
    font-size: 13px;
    color: #000000;
    text-shadow: 1px 1px 1px rgba(0,0,0,0.3);
    border: 1px solid rgba(0,0,0,0.3);
    border-radius: 4px;
    box-shadow: inset 0 -5px 45px rgba(100,100,100,0.2), 0 1px 1px rgba(255,255,255,0.2);
    -webkit-transition: box-shadow .5s ease;
    -moz-transition: box-shadow .5s ease;
    -o-transition: box-shadow .5s ease;
    -ms-transition: box-shadow .5s ease;
    transition: box-shadow .5s ease;
}

```

app.py

```

from flask import Flask, render_template, request, redirect, url_for, session
import ibm_db
import json
import requests
app = Flask(__name__)

```

```

conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=3883e7e4-18f5-4afe-be8c-
fa31c41761d2.bs2io90l08kqb1od8lclg.databases.appdomain.cloud;PORT=31498;SECURITY=SSL;SSL
ServerCertificate=DigiCertGlobalRootCA.crt;UID=sch83401;PWD=j7QZUHGAUGbPhns",",")

```

```

@app.route('/registration')
def home():
    return render_template('register.html')

@app.route('/register',methods=['POST'])
def register():
    x = [x for x in request.form.values()]
    print(x)
    name=x[0]
    email=x[1]
    phone=x[2]
    city=x[3]
    infect=x[4]
    blood=x[5]
    password=x[6]
    sql = "SELECT * FROM plasmadonor WHERE email =?"
    stmt = ibm_db.prepare(conn, sql)
    ibm_db.bind_param(stmt,1,email)
    ibm_db.execute(stmt)
    account = ibm_db.fetch_assoc(stmt)
    print(account)
    if account:
        return render_template('register.html', pred="You are already a member, please login using
your details")
    else:
        insert_sql = "INSERT INTO plasmadonor VALUES (?, ?, ?, ?, ?, ?, ?)"
        prep_stmt = ibm_db.prepare(conn, insert_sql)
        ibm_db.bind_param(prepare_stmt, 1, name)
        ibm_db.bind_param(prepare_stmt, 2, email)
        ibm_db.bind_param(prepare_stmt, 3, phone)
        ibm_db.bind_param(prepare_stmt, 4, city)
        ibm_db.bind_param(prepare_stmt, 5, infect)
        ibm_db.bind_param(prepare_stmt, 6, blood)
        ibm_db.bind_param(prepare_stmt, 7, password)
        ibm_db.execute(prepare_stmt)
        return render_template('register.html', pred="Registration Successful, please login using your
details")

@app.route('/')
@app.route('/login')
def login():
    return render_template('login.html')

```

```

@app.route('/loginpage',methods=['POST'])
def loginpage():
    user = request.form['user']
    passw = request.form['passw']
    sql = "SELECT * FROM plasmadonor WHERE email =? AND password=?"
    stmt = ibm_db.prepare(conn, sql)
    ibm_db.bind_param(stmt,1,user)
    ibm_db.bind_param(stmt,2,passw)
    ibm_db.execute(stmt)
    account = ibm_db.fetch_assoc(stmt)
    print (account)
    print(user,passw)
    if account:
        return redirect(url_for('stats'))
    else:
        return render_template('login.html', pred="Login unsuccessful. Incorrect username /
password !")

```

```

@app.route('/stats')
def stats():
    '''sql = "SELECT blood FROM user group by blood"
    stmt = ibm_db.prepare(conn, sql)
    ibm_db.execute(stmt)
    count = ibm_db.fetch_assoc(stmt)
    print(count)'''
    return render_template('stats.html',b=5,b1=2,b2=3,b3=4,b4=2,b5=1,b6=2,b7=1,b8=1)

```

```

@app.route('/requester')
def requester():
    return render_template('request.html')

```

```

@app.route('/requested',methods=['POST'])
def requested():
    bloodgrp = request.form['bloodgrp']
    address = request.form['address']
    print(address)
    sql = "SELECT * FROM plasmadonor WHERE blood=?"
    stmt = ibm_db.prepare(conn, sql)
    ibm_db.bind_param(stmt,1,bloodgrp)
    ibm_db.execute(stmt)
    data = ibm_db.fetch_assoc(stmt)
    msg = "Need Plasma of your blood group for: "+address
    while data != False:
        print ("The Phone is : ", data["PHONE"])

```

```
url="https://www.fast2sms.com/dev/bulk?authorization=xCXuwWTzyjOD2ARd1EngbH3a7tKlq5P
kJ8YSf0Lh4FQZecs9iNI1dSvuqprxFwCKYJXA5amQkBE36RI&sender_id=FSTSMS&message="+msg+"&language=english&route=p&numbers="+str(data["PHONE"])]
    result=requests.request("GET",url)
    print(result)
    data = ibm_db.fetch_assoc(stmt)
    return render_template('request.html', pred="Your request is sent to the concerned people.")
```

```
if __name__ == "__main__":
    app.run(host='0.0.0.0', port=8080)
```

The image shows a web browser window displaying a 'Plasma Donor App' registration form. The form includes fields for Name, Email, Phone, City, COVID Infection Status, Blood Group, and Password. Below the form is a 'Register' button. The browser's address bar shows the file path: C:/Users/sivan/Downloads/ibmassign2/template/register.html.

Below the browser window, the IBM Db2 on Cloud console is visible. It shows a table named 'VSC20823.PLASMADONOR' with the following data:

NAME	MAIL	PHONE	CITY	COVIDINFECTIONSTATUS	BLOODGROUP	PASSWORD
caitlin	caitlin33@gmail.com	7778889997	Washington	uninfected	O negative	12345

