

Assignment -2

Assignment Date	23 September 2022
Student Name	Rajagnanaguru R
Student Roll no	2019103565
Maximum marks	2 Marks

Question 1:

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

The screenshot shows a database IDE interface. On the left, a sidebar lists 'Data objects' and 'Saved objects'. Under 'Data objects', there is a search bar and a tree view showing 'Tables' with 'STUDENT' listed. The main editor area shows a SQL script for creating a table named 'student' with columns: emailid (varchar(100)), username (varchar(200)), rollno (varchar(40)), and passwd (varchar(50)). The script is as follows:

```
1 create table student (  
2   emailid varchar(100),  
3   username varchar(200),  
4   rollno varchar(40),  
5   passwd varchar(50)  
6 );  
7
```

Below the script editor, there is a 'History' tab showing a table with columns: Script, Date, Status, and Runtime. The first entry is 'Untitled - 1' with a date of 'Nov 20, 2022 7:39:19 AM', a status of '1', and a runtime of '0.047 s'.

The screenshot shows the 'Results' tab of the database IDE. It displays 'Result set 1' with a table structure. The table has four columns: EMAILID, USERNAME, ROLLNO, and PASSWD. Below the table structure, there is a message: 'You don't have any data currently'.

2) Perform UPDATE, DELETE Queries with user table

The screenshot shows a database IDE interface. The main editor area shows a SQL script with the following lines:

```
6 );  
7  
8 select * from student;  
9  
10 insert into student values('user1@gmail.com', 'user1', '201910xxxx', 'pass1');
```

Below the script editor, there is a 'Results' tab showing a table with columns: Run time, Run by, Database, and Affected rows. The values are: Run time: 0.012 s, Run by: rxz06099, Database: crn:v1:bluemix:public:dashdb-for-tr..., Affected rows: 1.

Below the 'Results' tab, there is a 'Full query body' section showing the SQL script:

```
insert into student values('user1@gmail.com', 'user1',  
'201910xxxx', 'pass1')
```

Insert command

Table after insertion

```
6  ;;
7
8  select * from student;
```

Result set 1			
Details			
Filter table			
Total:2			
EMAILID	USERNAME	ROLLNO	PASSWD
user1@gmail.com	user1	201910xxxx	pass1
user2@gmail.com	user2	201910xxxx	pass2

Update command

```
12
13 update student set passwd='passuser2' where username='user2';
14 select * from student;
```

Result set 1			
Details			
Filter table			
Total:2			
EMAILID	USERNAME	ROLLNO	PASSWD
user1@gmail.com	user1	201910xxxx	pass1
user2@gmail.com	user2	201910xxxx	passuser2

Delete command

```
15
16 delete from student where emailid='user2@gmail.com';
17 select * from student;
```

Result set 1			
Details			
Filter table			
Total:1			
EMAILID	USERNAME	ROLLNO	PASSWD
user1@gmail.com	user1	201910xxxx	pass1

- 3) Connect python code to db2. [connecting via ODBC (open database connection) by sending dsn (data source name)]

```

#Create the dsn connection string
dsn = (
    "DRIVER={0};"
    "DATABASE={1};"
    "HOSTNAME={2};"
    "PORT={3};"
    "PROTOCOL={4};"
    "UID={5};"
    "PWD={6};"
    "SECURITY={7};").format(dsn_driver, dsn_database, dsn_hostname, dsn_port, dsn_protocol, dsn_uid, dsn_pwd,dsn_security)

print(dsn)

## Creating db connection
try:
    conn = ibm_db.connect(dsn, "", "")
    print ("Connected to database: ", dsn_database, "as user: ", dsn_uid, "on host: ", dsn_hostname)

except:
    print ("Unable to connect: ", ibm_db.conn_errormsg())

```

DRIVER={IBM DB2 ODBC DRIVER};DATABASE=BLUDB;HOSTNAME=815fa4db-dc03-4c70-869a-a9cc13f33084.bs2io90l08kqb1od8l1cg.databases.appdomain.cloud;PORT=30367;PROTOCOL=TCPIF
Connected to database: BLUDB as user: rxz06099 on host: 815fa4db-dc03-4c70-869a-a9cc13f33084.bs2io90l08kqb1od8l1cg.databases.appdomain.cloud

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

Before insertion:

```

15
16 delete from student where emailid='None';
17 select * from student;

```

History		Results	
Result set 1		Details	
Filter table		Total:3	
EMAILID	USERNAME	ROLLNO	PASSWD
user1@gmail.com	user1	201910xxxx	pass1
user1@gmail.com	user1	201910xxxx	pass1
raja@gmail.com	user1	2019103565	password987

Form:

Emailid:

Username:

Rollno:

Passwd:



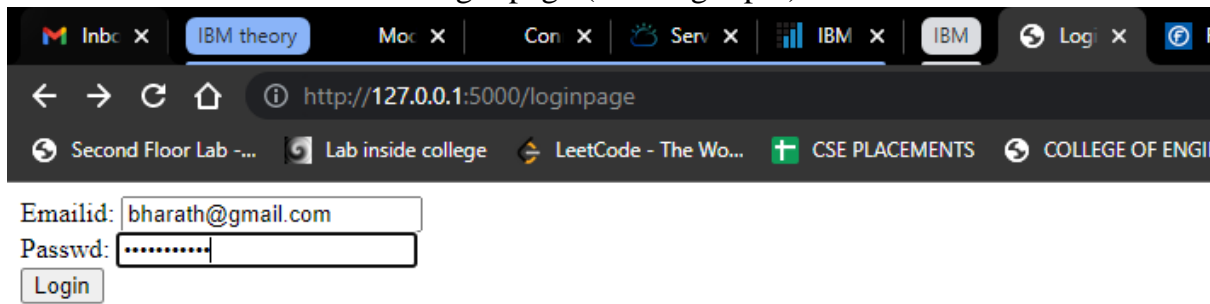
Inserted

After data insertion from form (registration)

```
14 select * from student;
15
16 delete from student where emailid='None';
17 select * from student;
```

History		Results	
Result set 1		Details	
Filter table		Total:4	
EMAILID	USERNAME	ROLLNO	PASSWD
user1@gmail.com	user1	201910xxxx	pass1
bharath@gmail.com	Bharath	2019103010	bharathpass
user1@gmail.com	user1	201910xxxx	pass1
raja@gmail.com	user1	2019103565	password987

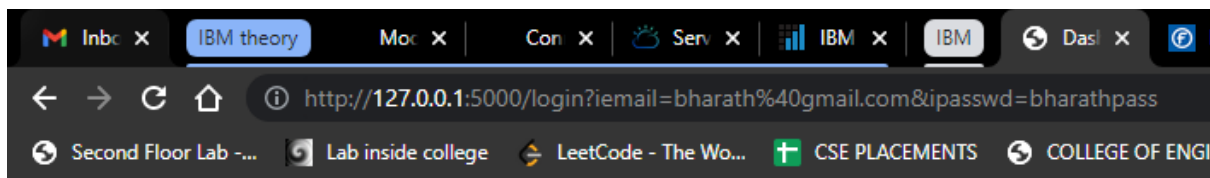
Login page (entering input)



Emailid:

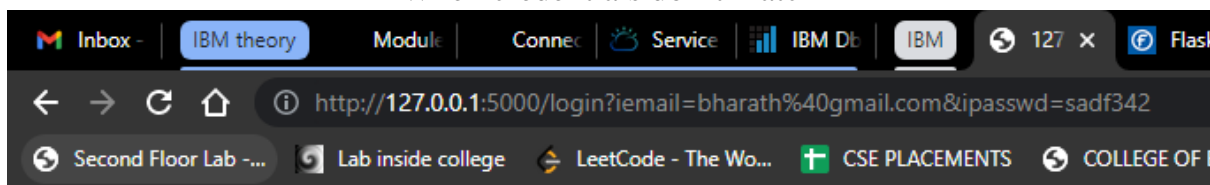
Passwd:

When credentials match



Hello there, this is the dashboard!

When credentials don't match



Incorrect credentials!