Assignment -2

Python Programming

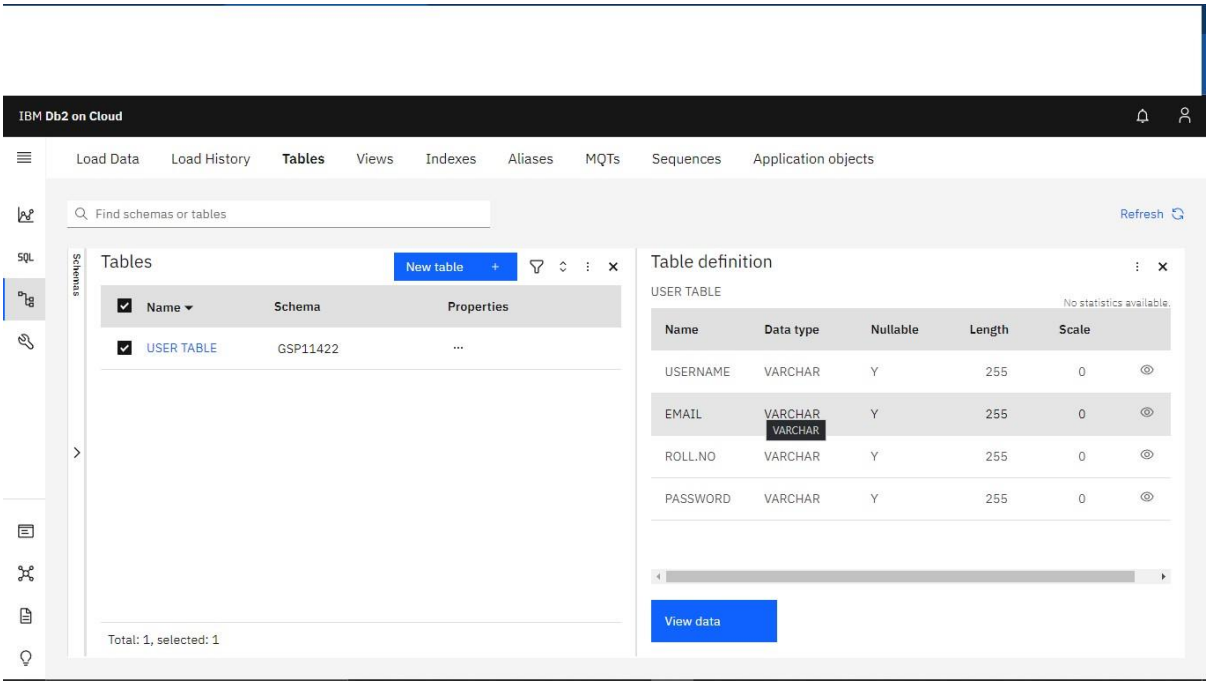
Assignment Date	28 Oct 2022
Student Name	Karan R
Team ID	PNT2022TMID31186
Maximum Marks	2 Marks

Question-1:

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

Solution:

Create table students



Question-2:

Perform UPDATE,DELETE queries with user table

Solution:

Insert into user values (“sathish”,23,’sarkarsathish@gmail.com’,”s@thish”);

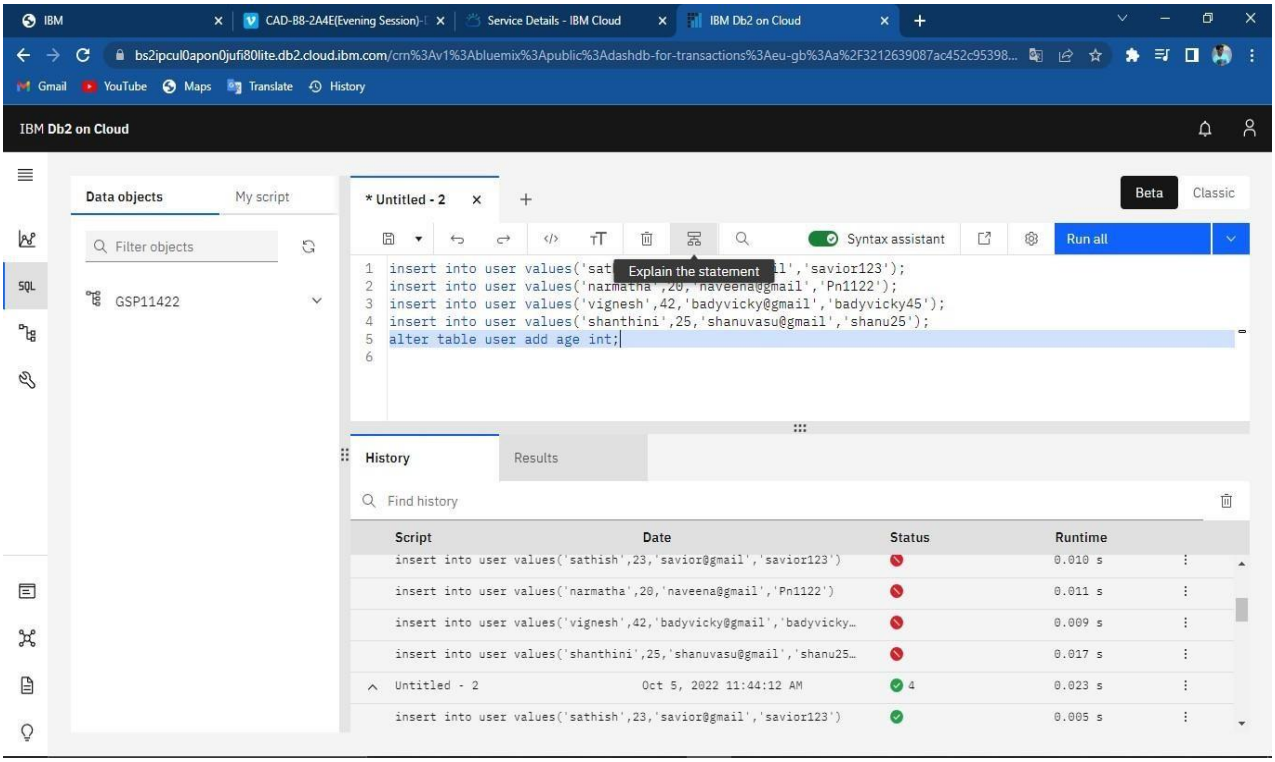
Insert into user values (“shanthini”,25,’shanu@gmail.com’,”shanu@cse”);

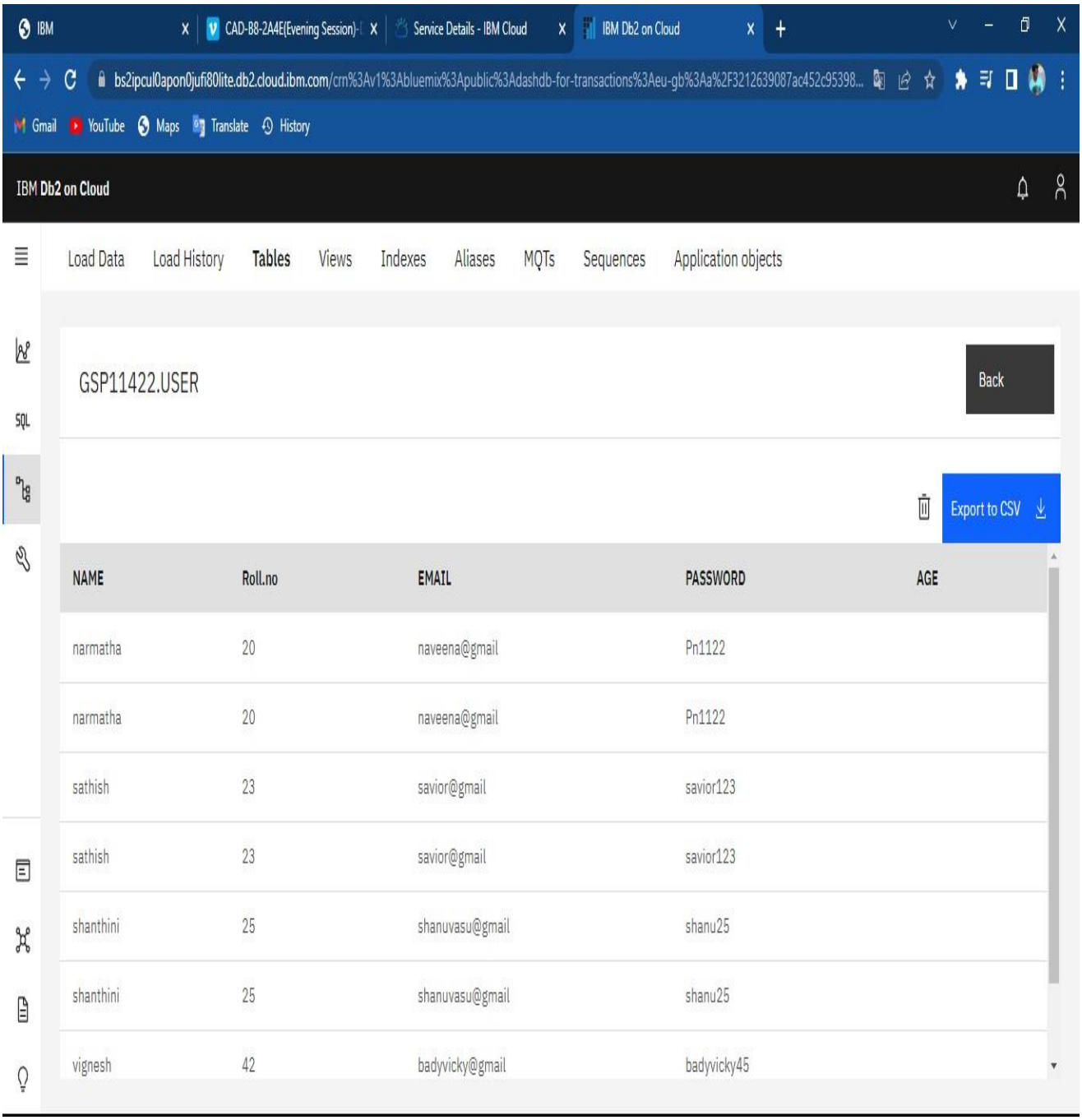
Insert into user values (“Narmatha”,20,’narmatha@gmail.com’,”narmu”);

Insert into user values (“vignesh”,37, ’vignesh@gmail.com’,”vicky”);

Alter table user add age int;

Drop table user;




IBM
CAD-B8-2A4E(Evening Session)-I
Service Details - IBM Cloud
IBM Db2 on Cloud
bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aeu-gb%3Aa%2F3212639087ac452c95398...
Gmail
YouTube
Maps
Translate
History
IBM Db2 on Cloud
Load Data
Load History
Tables
Views
Indexes
Aliases
MQTs
Sequences
Application objects
GSP11422.USER
Back
Export to CSV
NAME
Roll.no
EMAIL
PASSWORD
AGE
narmatha
20
naveena@gmail
Pn1122
narmatha
20
naveena@gmail
Pn1122
sathish
23
savior@gmail
savior123
sathish
23
savior@gmail
savior123
shanthini
25
shanuvasu@gmail
shanu25
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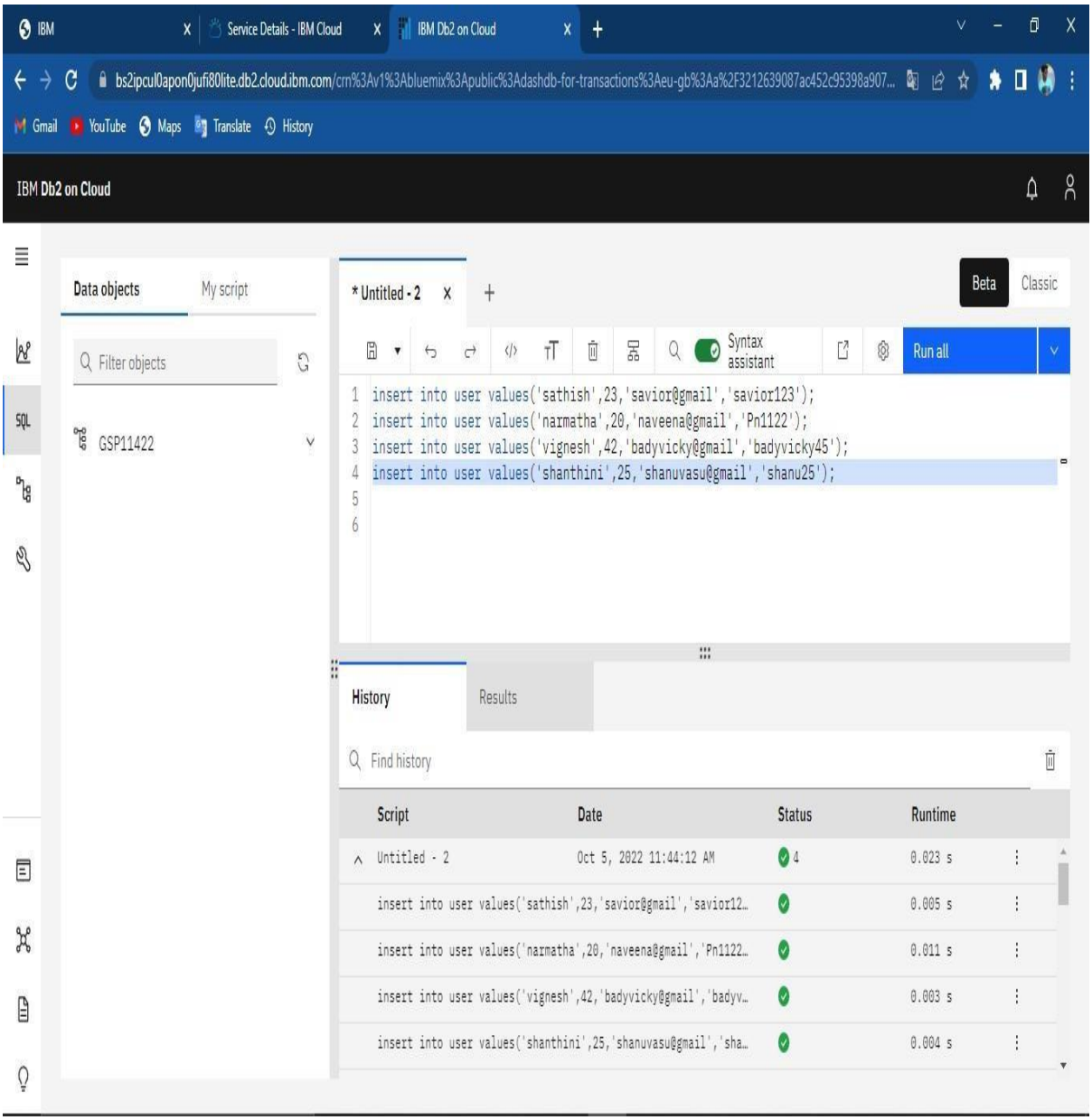
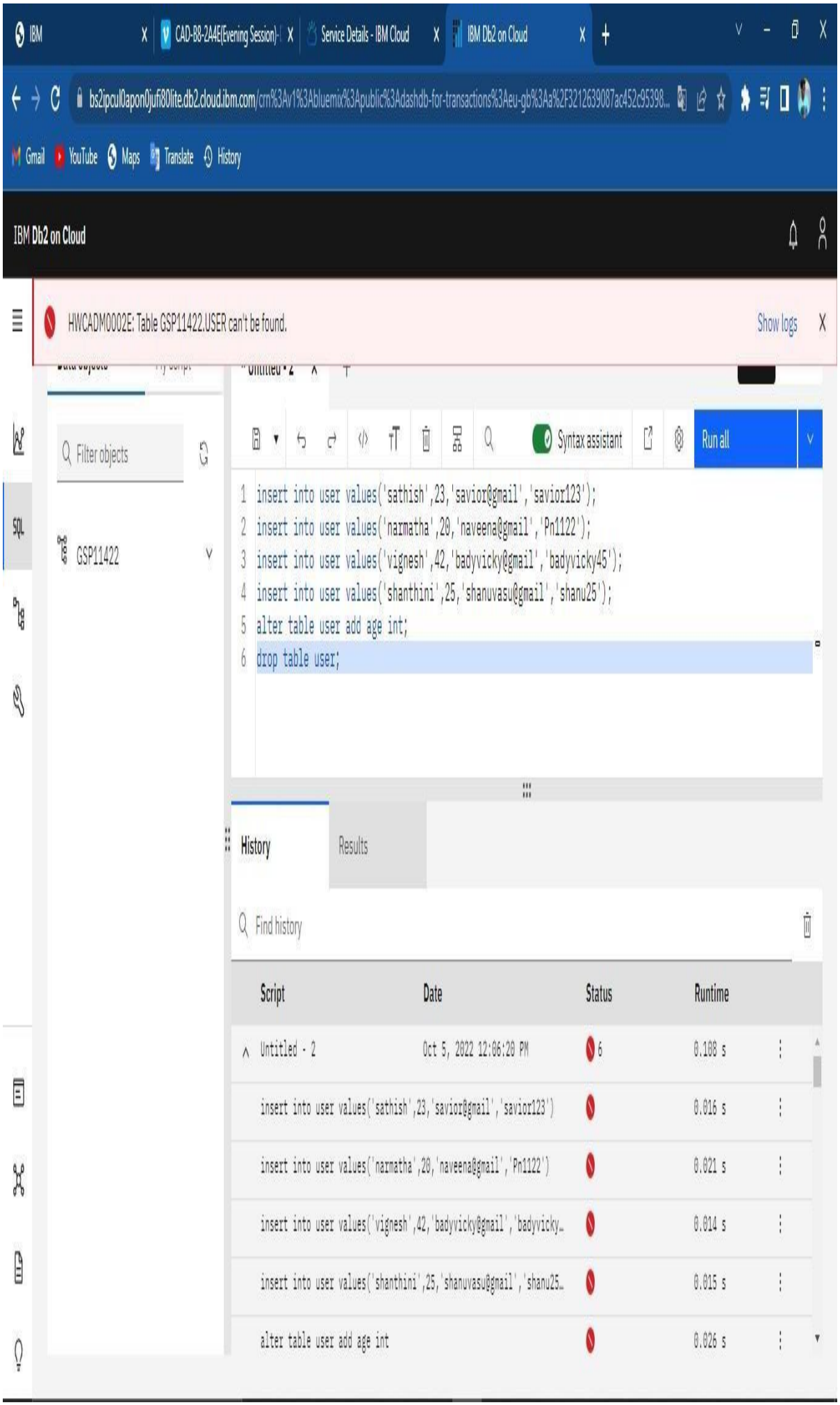
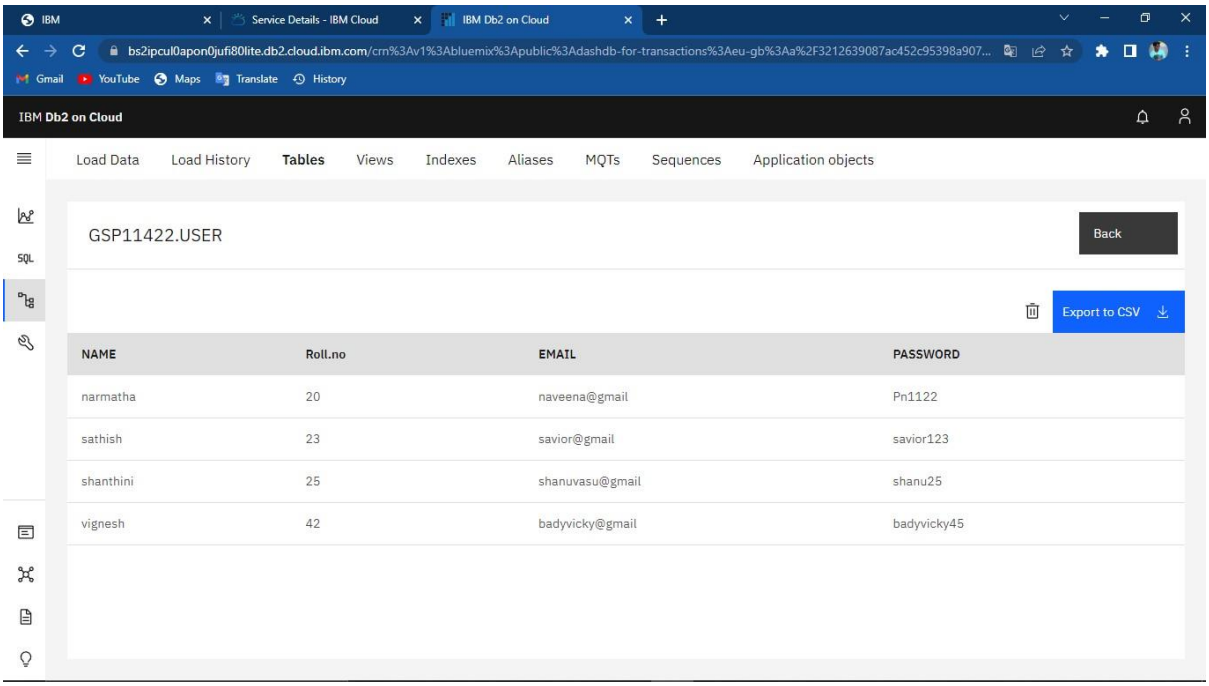
shanu25
vignesh
42
badyvicky@gmail
badyvicky45


IBM
Service Details - IBM Cloud
IBM Db2 on Cloud
bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aeu-gb%3Aa%2F3212639087ac452c95398a907...
Gmail
YouTube
Maps
Translate
History
IBM Db2 on Cloud
Data objects
My script
Filter objects
GSP11422
* Untitled - 2
Beta
Classic
Syntax assistant
Run all
1 insert into user values('sathish',23,'savior@gmail','savior123');
2 insert into user values('narmatha',20,'naveena@gmail','Pn1122');
3 insert into user values('vignesh',42,'badyvicky@gmail','badyvicky45');
4 insert into user values('shanthini',25,'shanuvasu@gmail','shanu25');
5
6
History
Results
Find history
Script
Date
Status
Runtime
Untitled - 2
Oct 5, 2022 11:44:12 AM
4
0.023 s
insert into user values('sathish',23,'savior@gmail','savior12...
0.005 s
insert into user values('narmatha',20,'naveena@gmail','Pn1122...
0.011 s
insert into user values('vignesh',42,'badyvicky@gmail','badyv...
0.003 s
insert into user values('shanthini',25,'shanuvasu@gmail','sha...
0.004 s


IBM
CAD-B8-244E(Evening Session)
Service Details - IBM Cloud
IBM Db2 on Cloud
Gmail
YouTube
Maps
Translate
History
IBM Db2 on Cloud
HWCADM0002E: Table GSP11422.USER can't be found.
Show logs
Filter objects
GSP11422
Syntax assistant
Run all
1 insert into user values('sathish',23,'savior@gmail','savior123');
2 insert into user values('narmatha',20,'naveena@gmail','Pn1122');
3 insert into user values('vignesh',42,'badyvicky@gmail','badyvicky45');
4 insert into user values('shanthini',25,'shanuvasu@gmail','shanu25');
5 alter table user add age int;
6 drop table user;
History
Results
Find history
Script
Date
Status
Runtime
Untitled - 2
Oct 5, 2022 12:06:20 PM
6
0.108 s
insert into user values('sathish',23,'savior@gmail','savior123')
0.016 s
insert into user values('narmatha',20,'naveena@gmail','Pn1122')
0.021 s
insert into user values('vignesh',42,'badyvicky@gmail','badyvicky…
0.014 s
insert into user values('shanthini',25,'shanuvasu@gmail','shanu25…
0.015 s
alter table user add age int
0.026 s



Question-3:

Connect python code to db2 **Solution:** from flask import Flask, render_template, request, redirect, url_for, session import ibm_db import re

app = Flask(____name_)
app.scret_key = 'a' conn =
ibm_db.conect("DATABASE=;HOSTNAME=;PORT=;SECURITY=SSL;SSL ServerCertificate=;UID=;PhD=", ' ', ' ')

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

@app.route('/Login', methods=['GET', 'POST'])

```
def login(): global
    userid msg = ' '
if request.method == 'POST':
        username = request.form['username'] password =
        request.form['password'] return render_template('home.html') sql =
        "SELECT * FROM Users WHERE userame=? 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['Loggeddin'] = True session['id'] =
        account['username'] userid =
        account['USERNAME'] session['username'] =
        acccount['USERNAME'] else:
            msg = 'Incorrect username/password' return
            render_template('login.html', msg=msg)
            @app.route('/register', methods=['GET',
            'POST']) def register():
    if request.method == 'POST': username =
        request.form['username'] email = request.form['email']
        password = request.form['password'] sql = "SELECT *
        FROM users WHERE username =?" stmt =
        ibm_db.prepare(conn, sql) ibm_db.bind_param(stmt,
        1, username) ibm_db.execute(stmt) account =
        ibm.db.fetch_assoc(stmt) print(account) if account:
            msg = "Accont already exists!"
        elif not re.match(r'[^@]+@[^@]+\.[^@]+', email):
            msg = "format does not match"
        elif not re.match(r'[A-Za-z0-9+', username):
            msg = "name must contain characters and numbers" else:
            insert_sql = "ISERT INTO users VALUES(?, ?, ?)"
            prep_stmt = ibm_db.prepare(conn.insert_sql)
```

```
            ibm_db.bind_param(prep_stmt, 1, username)
            ibm_db.bnd_param(prep_stmt, 2, email)
            ibm_db.bind_param(prep_stmt, 3, password)
            ibm_db.execute(prep_stmt) msg = "You have
            successfully registered"
    elif (request.method == "POST"): msg == "Please
        fill out the form" return
        render_template('register.html', msg=msg)
        @app.route('/dashboard') def dash():
    return  render_template('dashboard.html')


@app.route('/apply', methods=['GET","POST'])
def app(): msg = ' ' if request.method ==
"POST": username = request.form['username']
email = request.form['email'] qualification =
request.form['qualification'] skills =
request.form['skills'] jobs = request.form['s']
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, username)
ibm_db.execute(stmt) account =
ibm_db.fetch_assoc(stmt) print(account)
if account():
            msg = "there is only 1 job position" return
            render_template('apply.html', msg=msg)

        insert_sql = "INSERT INTO job VALUES(?, ?, ?, ?, ?)"
        prep_stmt = ibm_db.prepare(conn, insert_sql)
        ibm_db.bind_param(prep_stmt, 1, username)
        ibm_db.bind_param(prep_stmt, 2, email)
        ibm_db.bind_param(prep_stmt, 3, qualification)
```

```
        ibm_db.bind_param(prep_stmt,          4,          skills)
        ibm_db.bind_param(prep_stmt,          5,          jobs)
        ibm_db.execute(prep_stmt)    msg    =    "You    have
        successfully applie for job" session['Loggedin'] = True
       TEXT = "Hello user,a new application for job position" + job + isrequested
        "

elif request.method == "POST" msg =
        "Please fill out the form"
        return render_template('register.html', msg=msg)


 @app.route('/display')
 def display():
    print session["username"], session['id'] cursor =
    mysql.connection.cursor() cursor.execute('SELECT*FROM job
    WHERE userid=%s', (sessio['id'],)) account = cursor.fetchone()
    print("accountdisplay", account
```

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:**

```
from flask import Flask, render_template, request,
redirect, url_for, session import ibm_db import request


app = Flask(__name__)


app.scret_key = 'a'
```

```
conn =
ibm_db.conect("DATABASE=bludb;HOSTNAME=21fecfd8
-47b7-4937-840d-
d791d0218660.bs2io90l08kqb1od8lcg.databases.appdomain.c
loud;PORT=31864;SECURITY=SSL;SSLServerCertificate=
DigiCertGlobalRootCA.crt;USERNAME=gsp11422;PASSW
ORD=ixh307unZIzgLLB9", ' ', ' ')


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


@app.route('/Login', methods=['GET', 'POST'])
def login(): global userid msg = ' '
if request.method == 'POST':
        username = request.form['username'] password =
        request.form['password'] sql = "SELECT * FROM
        Users WHERE userame=?
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['Loggeddin'] = True session['id'] =
            account['username'] userid =
            account['USERNAME'] session['username'] =
            account['USERNAME'] msg='Logged in
            successfully!'
        else:
            msg = 'Incorrect username/password' return
            render_template('login.html',msg=msg)


@app.route('/register', methods=['GET', 'POST']) def
register():
    if request.method == 'POST': username =
        request.form['username'] email = request.form['email']
        password = request.form['password'] sql = "SELECT *
        FROM users WHERE username =?" stmt =
        ibm_db.prepare(conn, sql) ibm_db.bind_param(stmt,
        1, username) ibm_db.execute(stmt)
        account =
        ibm_db.fetch_assoc(stmt)
        print(account) if account:
            msg = "Account already exists!"
        elif not re.match(r'[^@]+@[^@]+\.[^@]+', email):
```

```
            msg = "Invalid email address"
        elif not re.match(r'[A-Za-z0-9+', username):
            msg = "name must contain characters and numbers" else:
            insert_sql = "INSERT INTO users VALUES(?, ?,
            ?)" prep_stmt = ibm_db.prepare(conn.insert_sql)
            ibm_db.bind_param(prep_stmt, 1, username)
            ibm_db.bnd_param(prep_stmt, 2, email)
            ibm_db.bind_param(prep_stmt, 3, password)
            ibm_db.execute(prep_stmt) msg = "You have
            successfully registered"
    elif request.method == "POST":
            msg == "Please fill out the form"
    return render_template('register.html', msg=msg)


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


@app.route('/apply', methods=['GET","POST'])
def app(): msg = ' ' if request.method ==
"POST": username = request.form['username']
email = request.form['email'] qualification =
request.form['qualification'] skills =
request.form['skills'] jobs = request.form['s']
```

```
stmt = ibm_db.prepare(conn,sql)
ibm_db.bind_param(stmt, 1, username)
ibm_db.execute(stmt) account =
ibm_db.fetch_assoc(stmt) print(account)

if account():
        msg = "there is only 1 job position" return
        render_template('apply.html', msg=msg)
        insert_sql = "INSERT INTO job VALUES(?,
        ?, ?, ?, ?)" prep_stmt = ibm_db.prepare(conn,
        insert_sql) ibm_db.bind_param(prep_stmt, 1,
        username) ibm_db.bind_param(prep_stmt, 2,
        email) ibm_db.bind_param(prep_stmt, 3,
        qualification) ibm_db.bind_param(prep_stmt,
        4, skills) ibm_db.bind_param(prep_stmt, 5,
        jobs) ibm_db.execute(prep_stmt) msg = "You
        have successfully applie for job"
        session['Loggedin'] = True
    TEXT = "Hello user,a new application for job position + job
+ is requested"

  elif request.method == "POST": msg
    = "Please fill out the form"
    return render_template('register.html', msg=msg)
```

```
@app.route('/display') def
display():
    print
    session["username"], session['id'] cursor =
    mysql.connection.cursor()
    cursor.execute('SELECT*FROM job WHERE userid=%s',
(session['id'],)) account =
    cursor.fetchone()
    print("accountdisplay", account)
return render_template('display.html',account=account)

@app.route('/logout')

def logout():
    session.pop('loggedin',None)
    session.pop('id',None)
    session.pop('username',None)
    return render_template('home.html')

if __name__== '__main__': app.run(host
    ='0.0.0.0')
```