Assignment -2

Python Programming

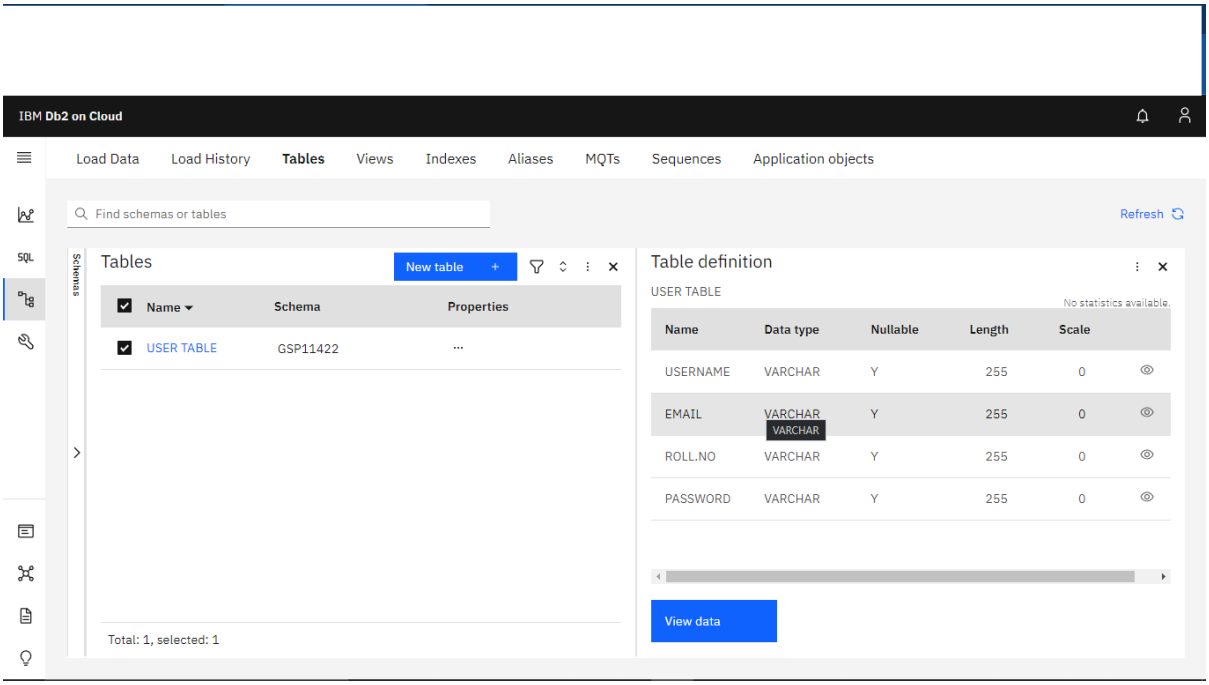
Assignment Date	27 September 2022
Student Name	M.Vignesh
Student Roll Number	421319104042
Maximum Marks	2 Marks

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”);

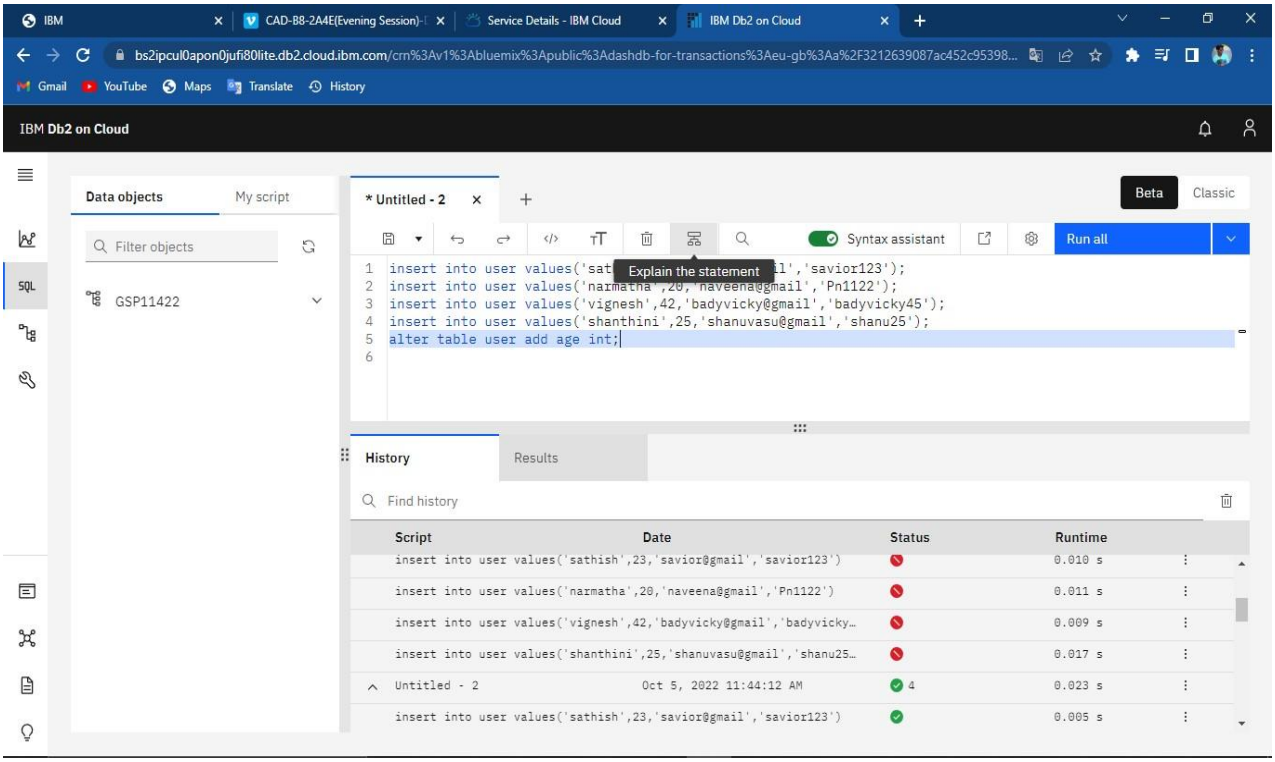
Insert into user values (“shanthini”,25,’shanu@gmail.com’,”shanu@cse”);

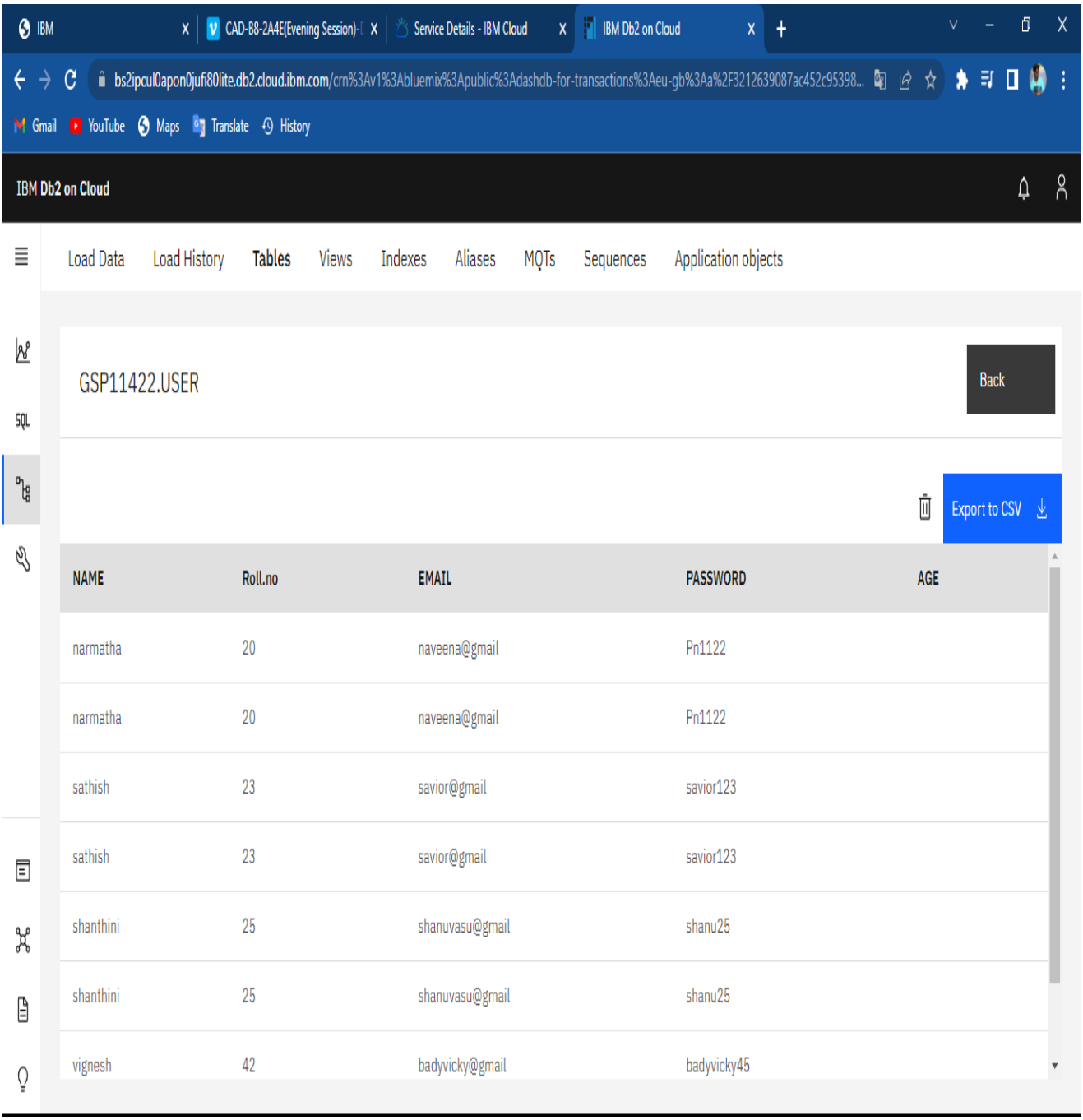
Insert into user values (“Narmatha”,20,’narmatha@gmail.com’,”narmu”);

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)-
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
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shanu25
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25
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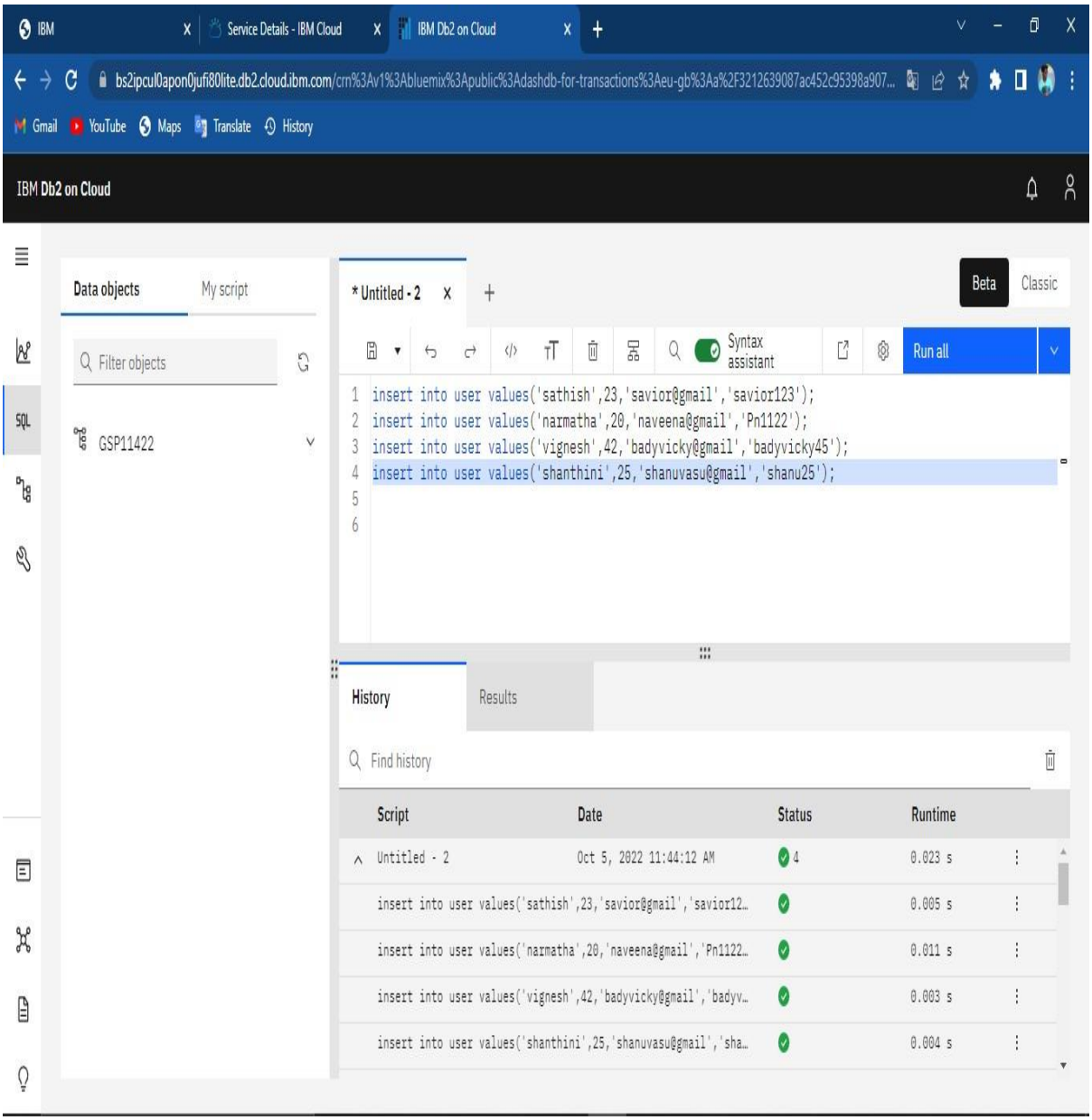
shanu25
vignesh
42
badyvicky@gmail
badyvicky45


IBM
Service Details - IBM Cloud
IBM Db2 on Cloud
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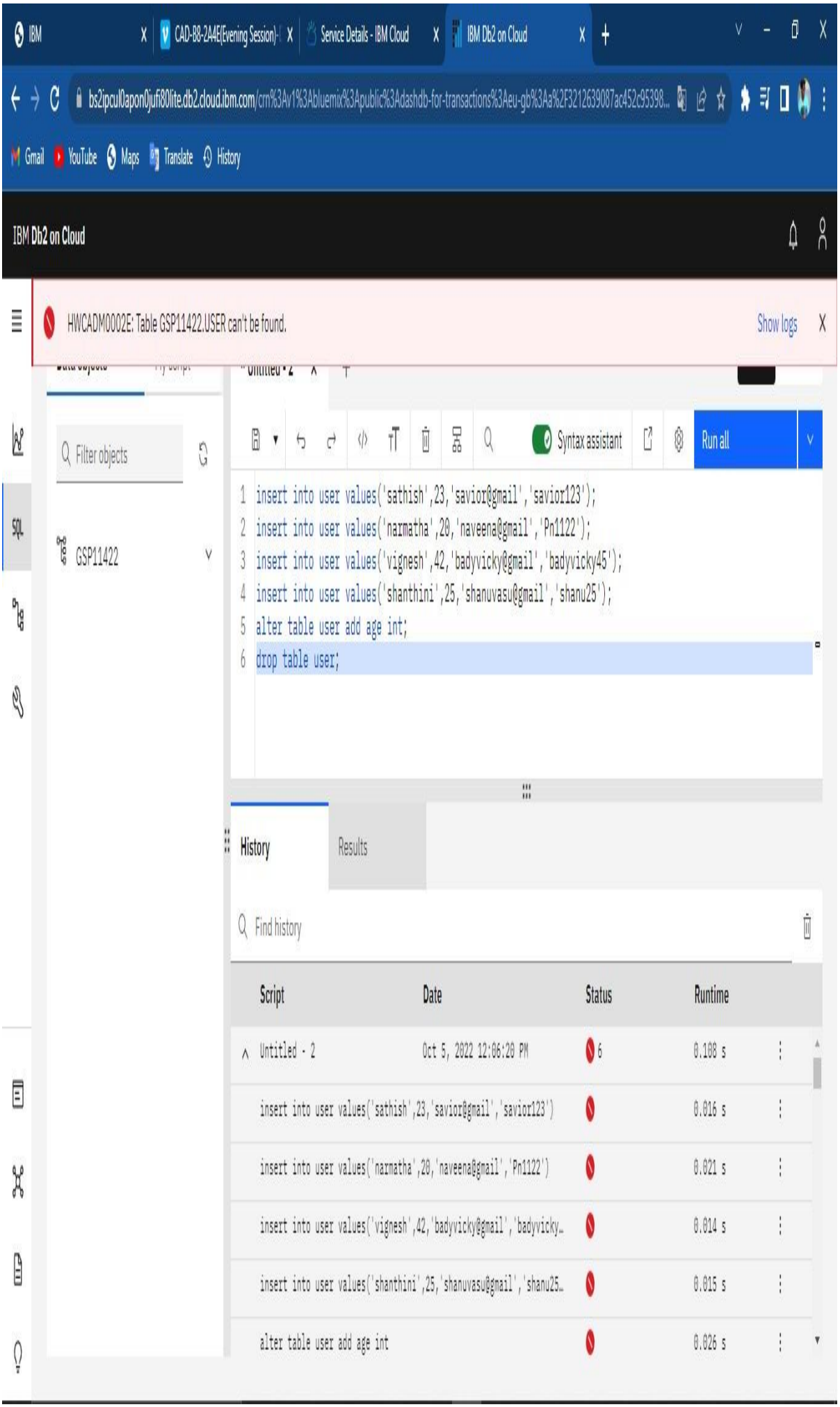
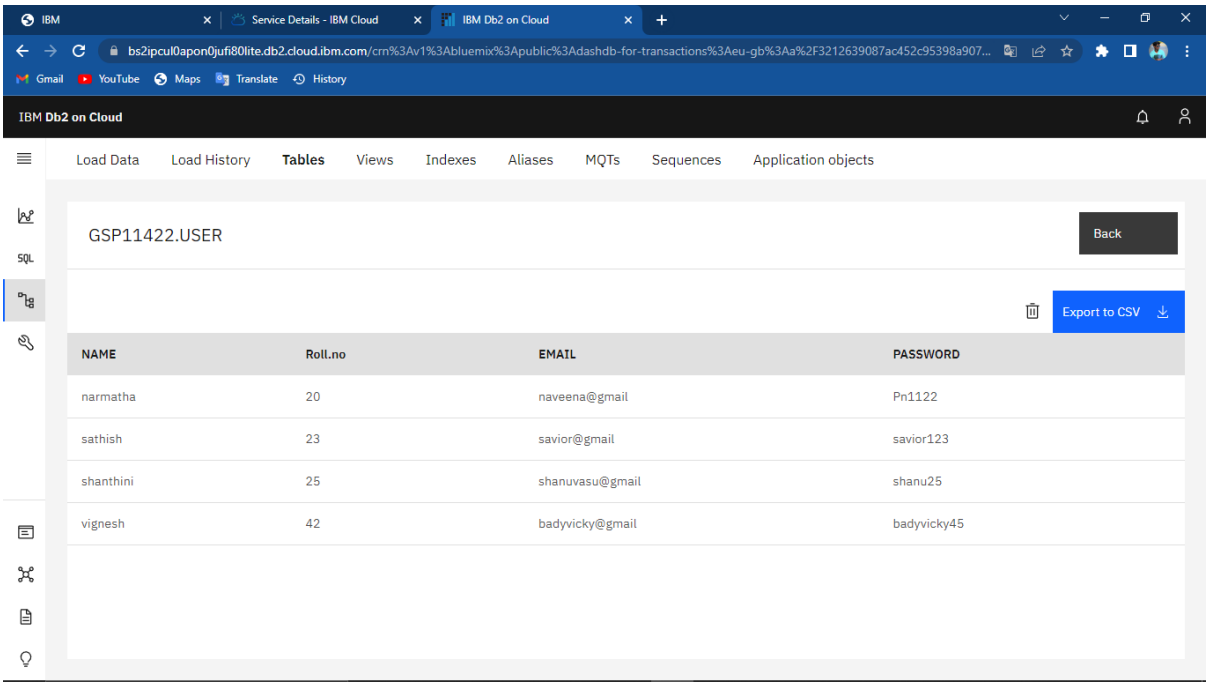
Gmail
YouTube
Maps
Translate
History
IBM Db2 on Cloud
Data objects
My script
Filter objects
GSP11422
* Untitled - 2
Beta
Classic
Syntax assistant
Run all
1 insert into user values('sathish',23,'savior@gmail','savior123');
2 insert into user values('narmatha',20,'naveena@gmail','Pn1122');
3 insert into 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)-I
Service Details - IBM Cloud
IBM Db2 on Cloud
bs2ipcul0apon0juf80lite.db2.cloud.ibm.com/cm%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aeu-gb%3Aa%2F3212639087ac452c95398...
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')
```