**Assignment -1**

Python Programming

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| Assignment Date | 27 September 2022 |
| Student Name | A.Shanthini |
| Student Roll Number | 421319104025 |
| Maximum Marks | 2 Marks |

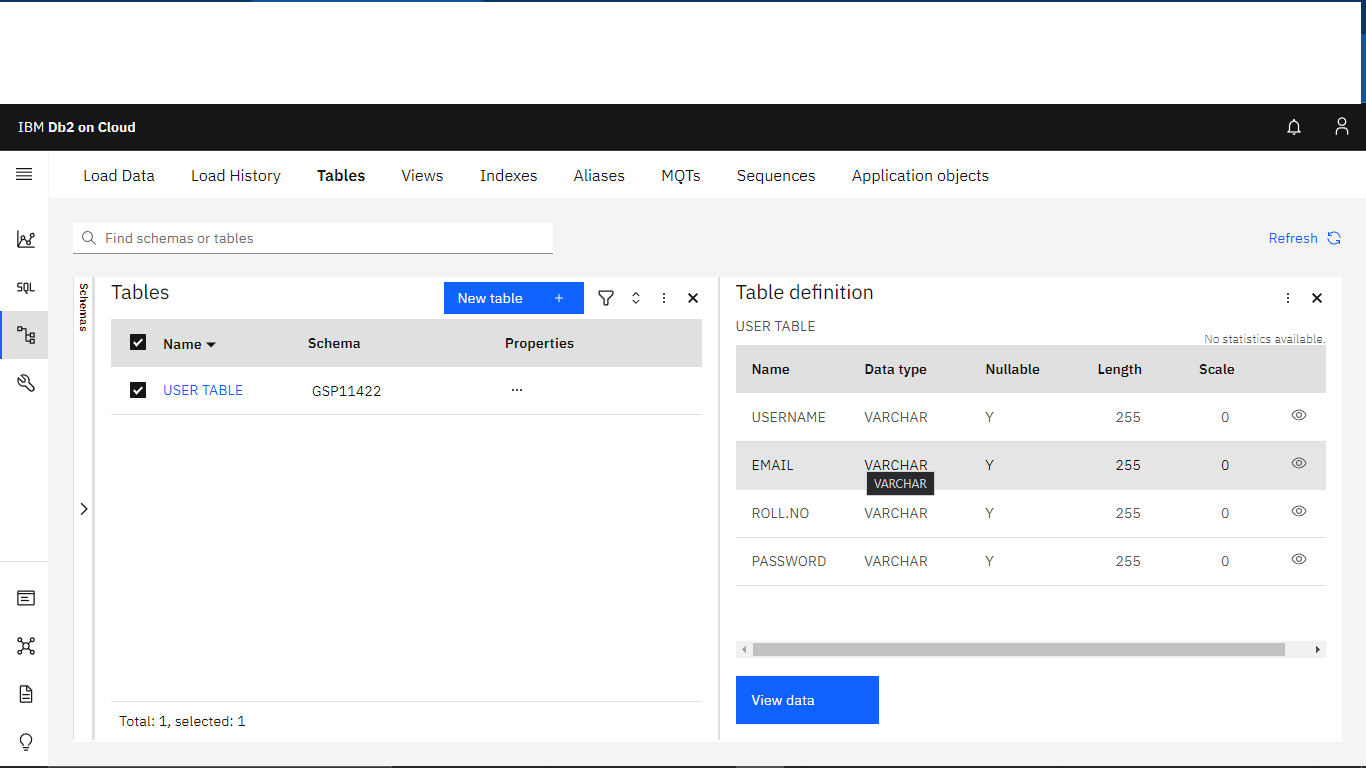
**Question-1:**

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

**Solution:**

Create table students

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**Question-2:**

Perform UPDATE,DELETE queries with user table

**Solution:**

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

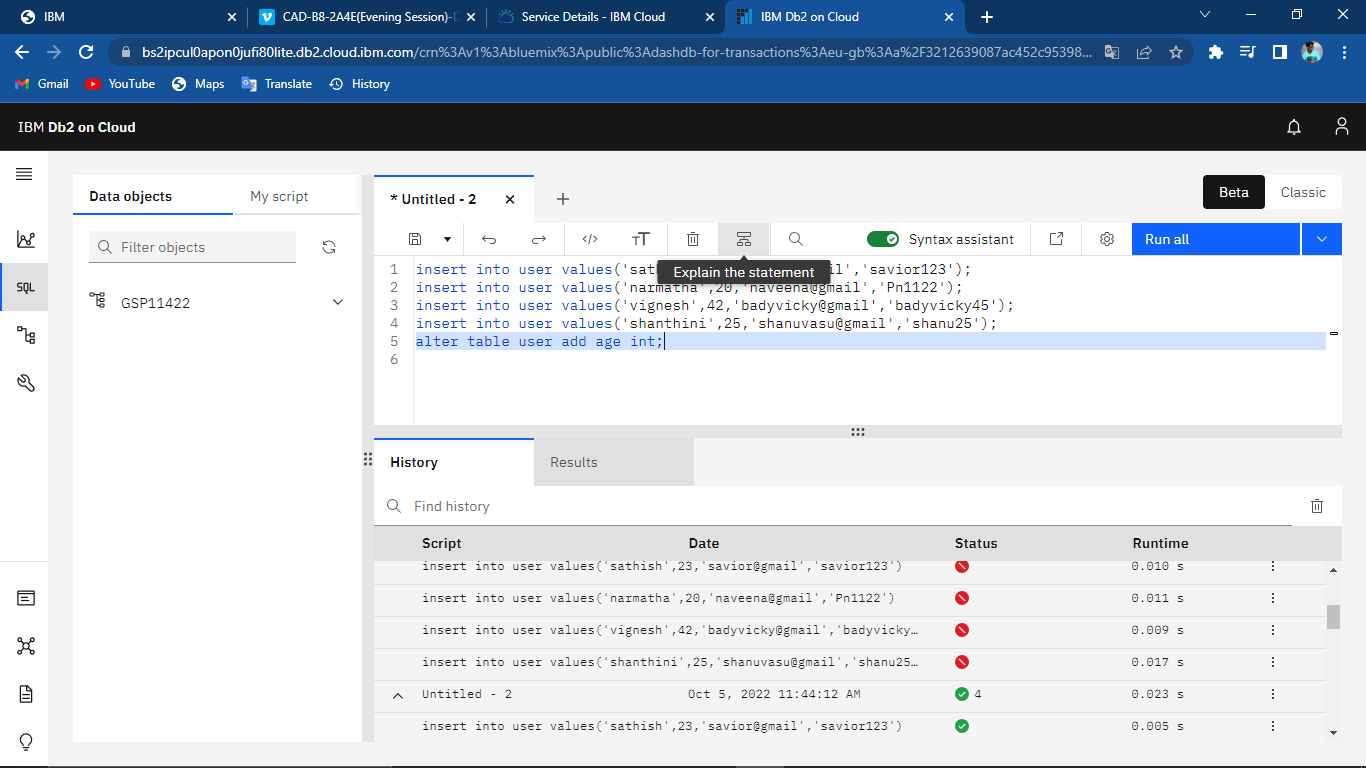
Insert into user values (“shanthini”,25,’[shanu@gmail.com](mailto:shanu@gmail.com)’,”shanu@cse”);

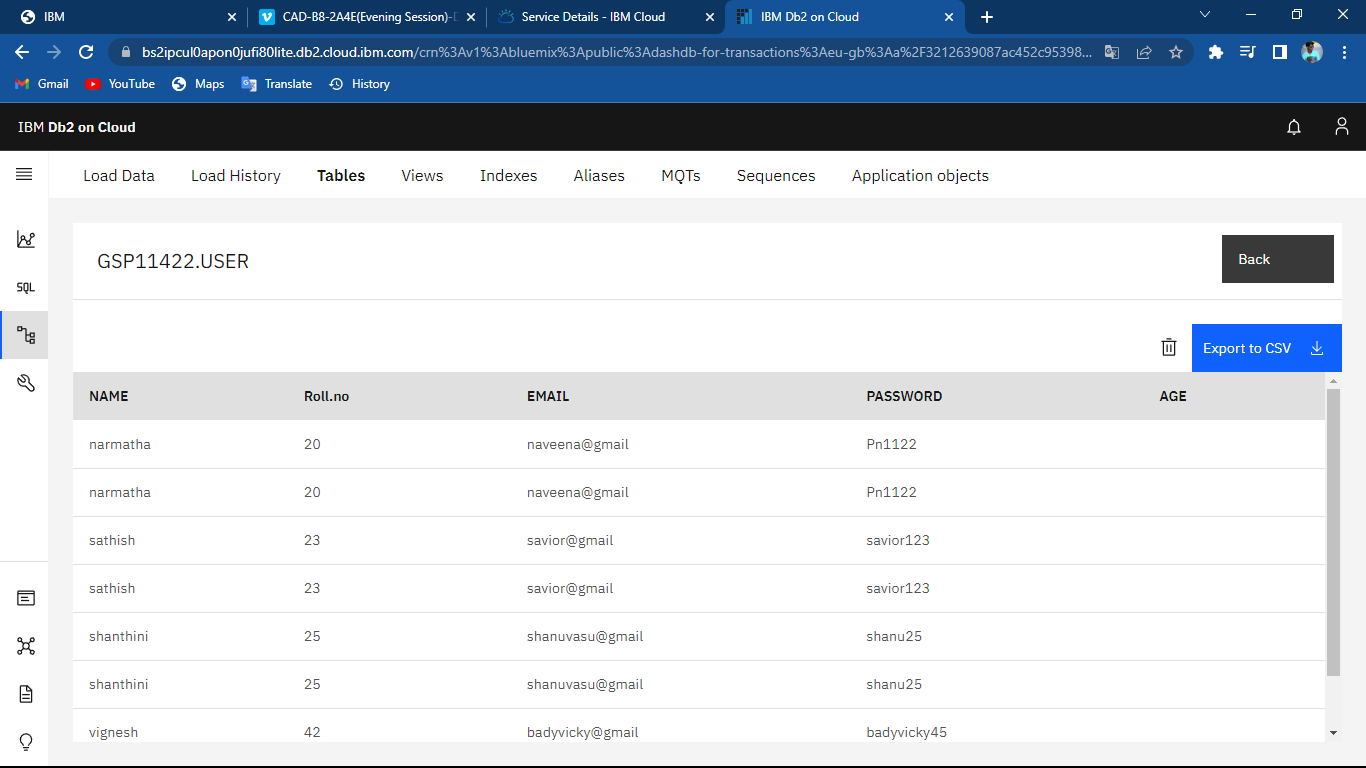
Insert into user values (“Narmatha”,20,’[narmatha@gmail.com](mailto:narmatha@gmail.com)’,”narmu”);

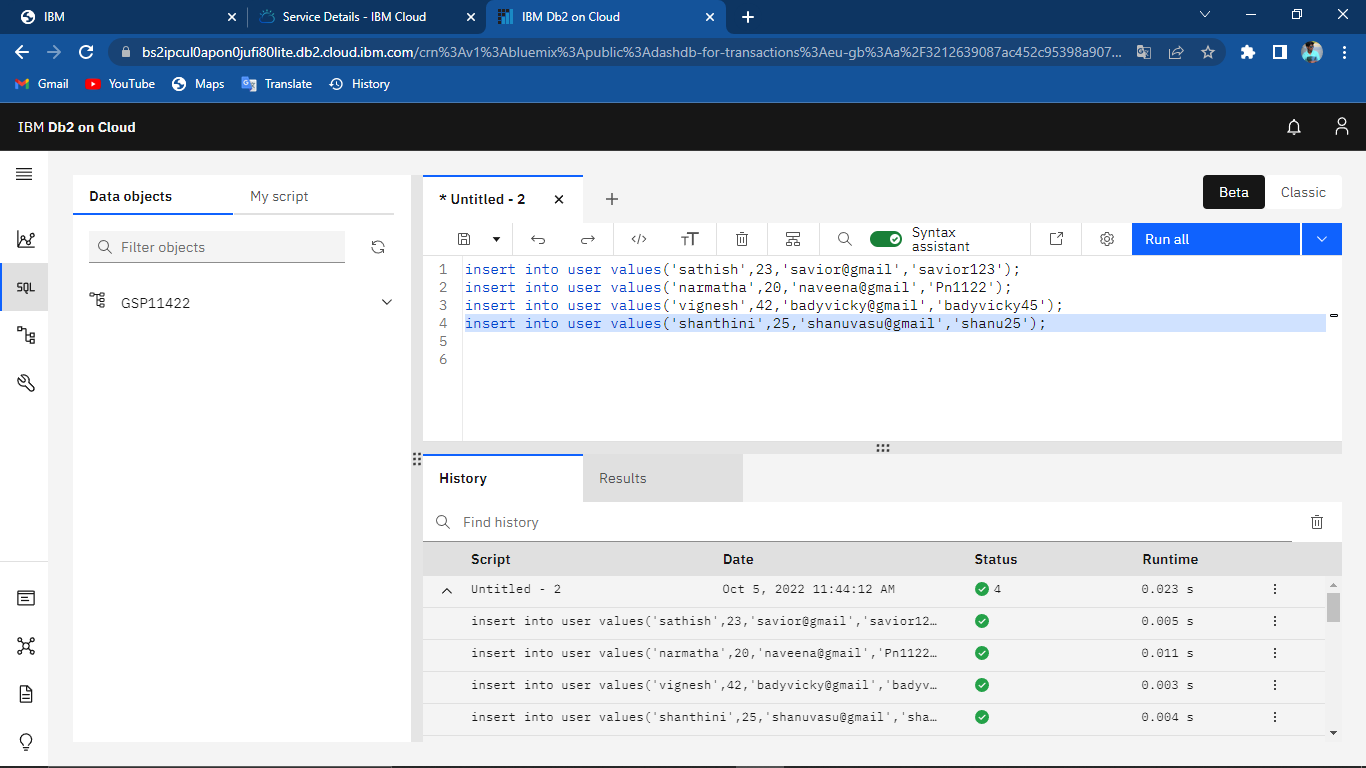
Insert into user values (“vignesh”,37, ’vignesh@gmail.com’,”vicky”);

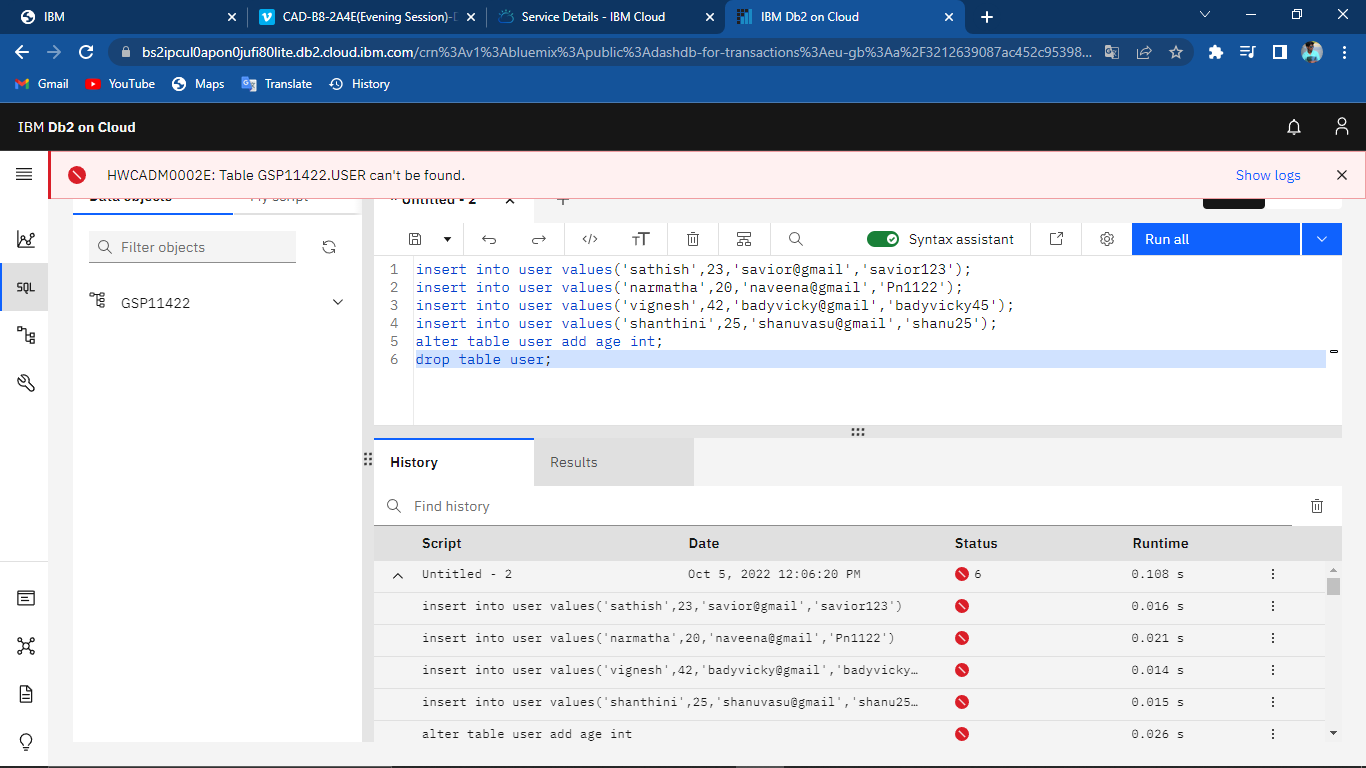
Alter table user add age int;

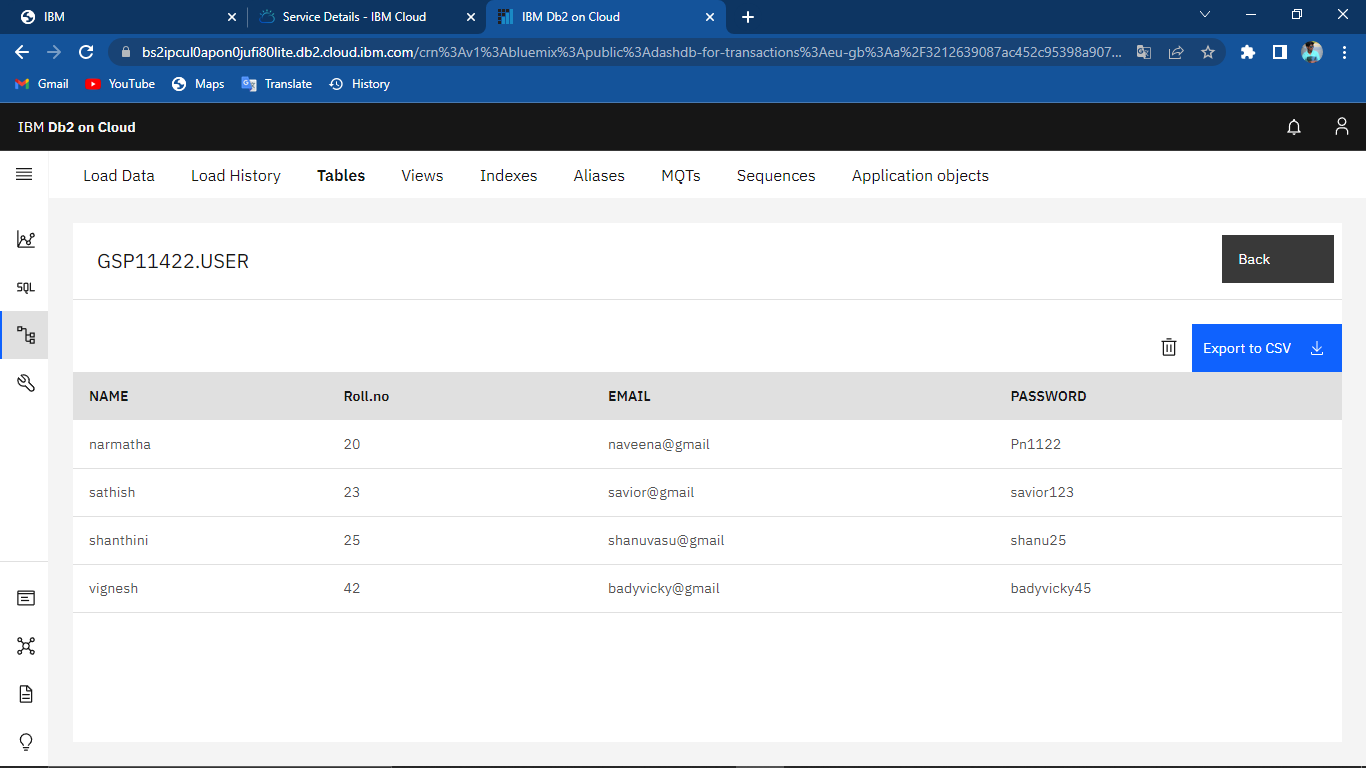
Drop table user;

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**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;SSLServerCertificate=;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

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| **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.cloud;PORT=31864;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;USERNAME=gsp11422;PASSWORD=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')