

IBM DB2 with PYTHON

Task ID	TSK-269540
Team ID	PNT2022TMID44550
Student Name	Jayaseelan T S
Student Roll Number	731719104010

TASK:

Create IBM DB2 and Connect with Python

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

conn=ibm_db.connect("DATABASE=bludb;HOSTNAME=2f3279a5-73d1-4859-88f0-
a6c3e6b4b907.c3n41cmd0nqnrk39u98g.databases.appdomain.cloud;PORT=30756;SECURITY=SSL;SSLServercertificate=DigiCertGlobalRootCA(1).crt;PROTOCOL=TCPIP;UID=vcb77143;PWD=h2Xoiw4L2GJz5tSU;", "", "")

@app.route('/')
@app.route('/login', methods =['GET', 'POST'])
def login():
    msg = ''
    if request.method == 'POST' and 'email' in request.form and 'password' in request.form:
        username = request.form['email']
        password = request.form['password']
        stmt = ibm_db.exec_immediate(conn,'SELECT * FROM JAYASEELAN_DB WHERE email = % s AND password = % s', (email, password, ))
        account = ibm_db.fetch_both(stmt)
        if username==password:
            session['loggedin'] = True
            session['id'] = account['id']
            session['email'] = account['email']
            msg = 'Logged in successfully !'
```

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return render_template('index.html', msg = msg)
    else:
        msg = 'Incorrect username / password !'
        return render_template('login.html', msg = msg)

@app.route('/register', methods = ['GET', 'POST'])
def register():
    msg = ''
    if request.method == 'POST' and 'username' in request.form and 'password' in
request.form and 'email' in request.form and 'roll_no' in request.form :
        roll_no = request.form['roll_no']
        username = request.form['username']
        password = request.form['password']
        cpassword = request.form['cpassword']
        email = request.form['email']
        conn=ibm_db.connect("DATABASE=bludb;HOSTNAME=2f3279a5-73d1-4859-88f0-
a6c3e6b4b907.c3n41cmd0nqnrk39u98g.databases.appdomain.cloud;PORT=30756;SECURITY=S
SL;SSLServercertificate=DigiCertGlobalRootCA.crt;PROTOCOL=TCPIP;UID=vcb77143;PWD=
h2Xoiw4L2GJz5tSU;", "", "")
        stmt = ibm_db.exec_immediate(conn,'SELECT * FROM JAYASEELAN_DB')
        if email==cpassword:
            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 = 'Username must contain only characters and numbers !'
        elif not username or not password or not email:
            msg = 'Please fill out the form !'
        else:
            sql=ibm_db.exec_immediate(conn,'INSERT INTO JAYASEELAN_DB (roll_no,
username, email, password, cpassword) VALUES (%s, % s, % s, % s)')
            msg = 'You have successfully registered !'
            print("you have successfully registered!")
            return redirect(url('/login'))
        elif request.method == 'POST':
            msg = 'Please fill out the form !'
        return render_template('signup.html', msg = msg)

if __name__=='__main__':
    app.run(debug=True)

```

```
import ibm_db
ibm_db.connect("DATABASE=bludb;HOSTNAME=2f3279a5-73d1-4859-88f0-
a6c3e6b4b907.c3n41cmd0nqn timerk39u98g.databases.appdomain.cloud;PORT=30756;SECURITY=SSL;SSLServercertificate=DigiCertGlobalRootCA.crt;PROTOCOL=TCPIP;UID=vcb77143;PWD=
h2Xoiw4L2GJz5tSU;", "", "")
```

The screenshot shows the IBM Db2 on Cloud web interface. The browser tabs include Docker Hub, Inbox (1) - tjjay..., IBM, Install on Windows, Service Details, and IBM Db2 on Cloud. The URL is a long alphanumeric string. The interface has a top navigation bar with 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The 'Tables' tab is selected, and the table 'VCB77143.JAYASEELAN_DB' is displayed. The table has three columns: 'RNO', 'NAME', and 'ATTENDANCE'. There are two rows of data: one with '1', 'jagan', and '80', and another with '2', 'jeevitha', and '90'. A 'Back' button is in the top right, and an 'Export to CSV' button is in the top right of the table area. The bottom of the screen shows a Windows taskbar with various application icons and the system clock showing 8:44 AM on 11/10/2022.

RNO	NAME	ATTENDANCE
1	jagan	80
2	jeevitha	90