## This is meant to be super simple and can just be “done” in spare time.

## You will make typos. This will lead to debugging. Which is how we learn,

This will teach how some IOS XE Netconf commands work. You can ignore anything after #### marks which are meant to be comments.

This was stolen pretty heavily from <https://www.fir3net.com/Networking/Protocols/how-to-operate-a-device-using-netconf-and-python.html>

## NC Client, I don’t think is covered in depth in devasc (but is in EN Auto), but this is super simple, and can demonstrate XML

## Step 1: install what you need

This is super simple, clean and easy

sudo pip install ncclient pyang pyangbind xmltodict

## Step 2: start python and connect

python3

>>> now your in python

from ncclient import manager

xeuser=”developer”

xepass=”C1sco12345”

xeport=10000

xehost=”ios-xe-mgmt.cisco.com”

### Alright, now, lets do something

m=manager.connect(host=xehost,port=xeport,username=xeuser,password=xepass,device\_params={‘name’:’csr’})

### that should not error out and should return a prompt from which you can type

print(m.connected)

## if it returned true, you, are connected

## Step 3: ask the device what capabilities it supports

for c in m.server\_capabilities:

print(c)

## Step 4 : dump running config

m.get+config(‘running’)