

Programación de Redes

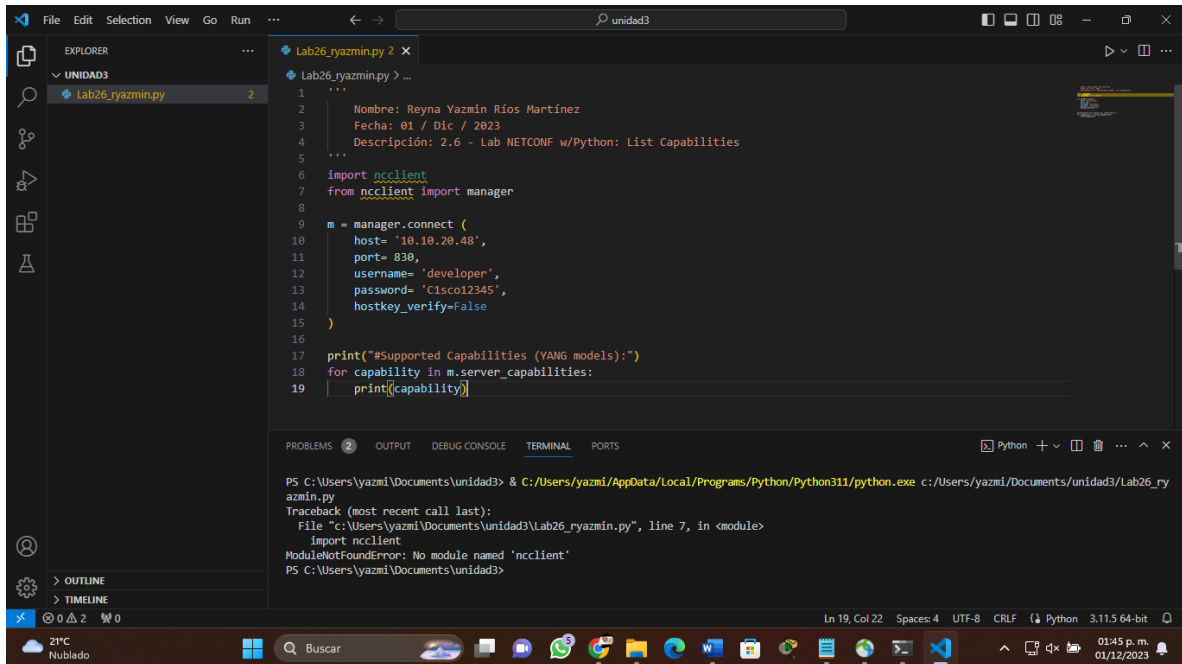
Unidad III. Programación de Redes

2.7 Lab – NETCONF wPython List Capabilities

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Fecha: 01 / Dic / 2023



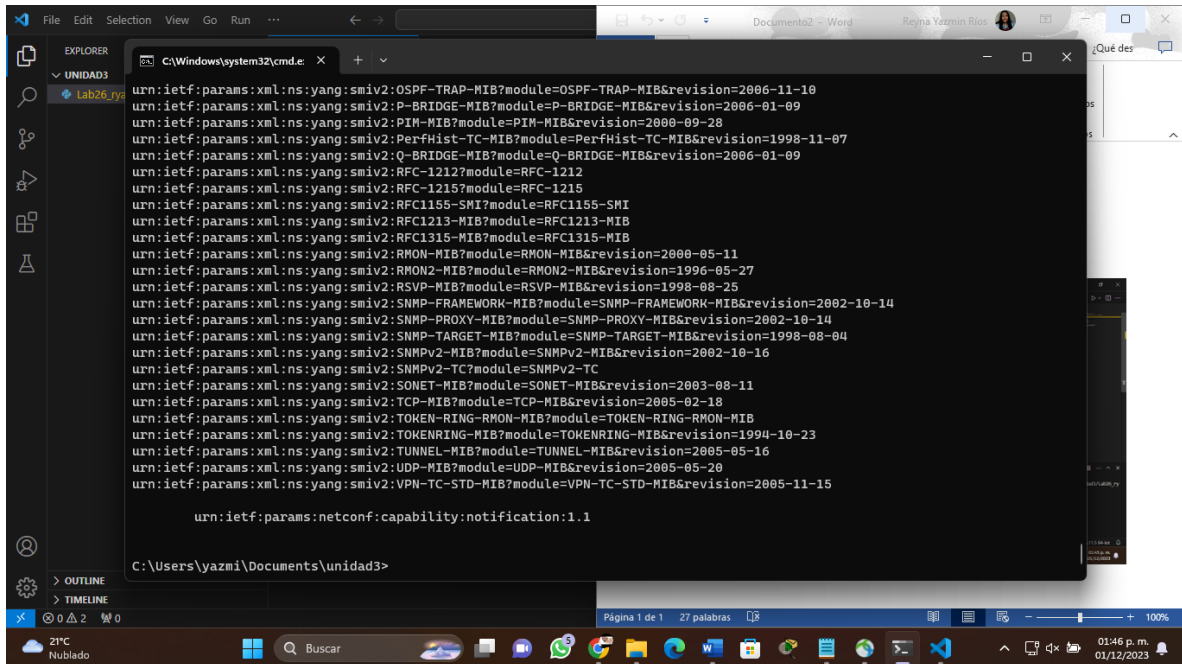
The screenshot shows a Visual Studio Code editor window with a file named 'Lab26_ryazmin.py' open. The script is a Python program that connects to a NETCONF server and lists its capabilities. The code is as follows:

```
1 '''
2     Nombre: Reyna Yazmin Ríos Martínez
3     Fecha: 01 / Dic / 2023
4     Descripción: 2.6 - Lab NETCONF wPython: List Capabilities
5 '''
6 import ncclient
7 from ncclient import manager
8
9 m = manager.connect (
10     host= '10.10.20.48',
11     port= 830,
12     username= 'developer',
13     password= 'Cisco12345',
14     hostkey_verify=False
15 )
16
17 print("#Supported Capabilities (YANG models):")
18 for capability in m.server_capabilities:
19     print(capability)
```

The terminal output shows the execution of the script, which results in a traceback error due to the 'ncclient' module not being found:

```
PS C:\Users\yazmi\Documents\unidad3> & C:/Users/yazmi/AppData/Local/Programs/Python/Python311/python.exe c:/Users/yazmi/Documents/unidad3/Lab26_ryazmin.py
Traceback (most recent call last):
  File "c:/Users/yazmi/Documents/unidad3/Lab26_ryazmin.py", line 7, in <module>
    import ncclient
ModuleNotFoundError: No module named 'ncclient'
PS C:\Users\yazmi\Documents\unidad3>
```

The status bar at the bottom of the editor indicates the current line and column (Ln 19, Col 22), the number of spaces (4), the encoding (UTF-8), the line ending (CRLF), the interpreter (Python), and the bitness (3.11.5 64-bit).



```
urn:ietf:params:xml:ns:yang:smiv2:OSPF-TRAP-MIB?module=OSPF-TRAP-MIB&revision=2006-11-10
urn:ietf:params:xml:ns:yang:smiv2:P-BRIDGE-MIB?module=P-BRIDGE-MIB&revision=2006-01-09
urn:ietf:params:xml:ns:yang:smiv2:PIW-MIB?module=PIW-MIB&revision=2000-09-28
urn:ietf:params:xml:ns:yang:smiv2:PerfHist-TC-MIB?module=PerfHist-TC-MIB&revision=1998-11-07
urn:ietf:params:xml:ns:yang:smiv2:Q-BRIDGE-MIB?module=Q-BRIDGE-MIB&revision=2006-01-09
urn:ietf:params:xml:ns:yang:smiv2:RFC-1212?module=RFC-1212
urn:ietf:params:xml:ns:yang:smiv2:RFC-1215?module=RFC-1215
urn:ietf:params:xml:ns:yang:smiv2:RFC1155-SMI?module=RFC1155-SMI
urn:ietf:params:xml:ns:yang:smiv2:RFC1213-MIB?module=RFC1213-MIB
urn:ietf:params:xml:ns:yang:smiv2:RFC1315-MIB?module=RFC1315-MIB
urn:ietf:params:xml:ns:yang:smiv2:RMON-MIB?module=RMON-MIB&revision=2000-05-11
urn:ietf:params:xml:ns:yang:smiv2:RMON2-MIB?module=RMON2-MIB&revision=1996-05-27
urn:ietf:params:xml:ns:yang:smiv2:RSVP-MIB?module=RSVP-MIB&revision=1998-08-25
urn:ietf:params:xml:ns:yang:smiv2:SNMP-FRAMEWORK-MIB?module=SNMP-FRAMEWORK-MIB&revision=2002-10-14
urn:ietf:params:xml:ns:yang:smiv2:SNMP-PROXY-MIB?module=SNMP-PROXY-MIB&revision=2002-10-14
urn:ietf:params:xml:ns:yang:smiv2:SNMP-TARGET-MIB?module=SNMP-TARGET-MIB&revision=1998-08-04
urn:ietf:params:xml:ns:yang:smiv2:SNMPv2-MIB?module=SNMPv2-MIB&revision=2002-10-16
urn:ietf:params:xml:ns:yang:smiv2:SNMPv2-TC?module=SNMPv2-TC
urn:ietf:params:xml:ns:yang:smiv2:SONET-MIB?module=SONET-MIB&revision=2003-08-11
urn:ietf:params:xml:ns:yang:smiv2:TCP-MIB?module=TCP-MIB&revision=2005-02-18
urn:ietf:params:xml:ns:yang:smiv2:TOKEN-RING-RMON-MIB?module=TOKEN-RING-RMON-MIB
urn:ietf:params:xml:ns:yang:smiv2:TOKENRING-MIB?module=TOKENRING-MIB&revision=1994-10-23
urn:ietf:params:xml:ns:yang:smiv2:TUNNEL-MIB?module=TUNNEL-MIB&revision=2005-05-16
urn:ietf:params:xml:ns:yang:smiv2:UDP-MIB?module=UDP-MIB&revision=2005-05-20
urn:ietf:params:xml:ns:yang:smiv2:VPN-TC-MIB?module=VPN-TC-MIB&revision=2005-11-15

urn:ietf:params:netconf:capability:notification:1.1

C:\Users\yazmi\Documents\unidad3>
```

Is the Cisco-IOS-XE-cdp YANG model supported by the device? Si, si es compatible con el dispositivo.

