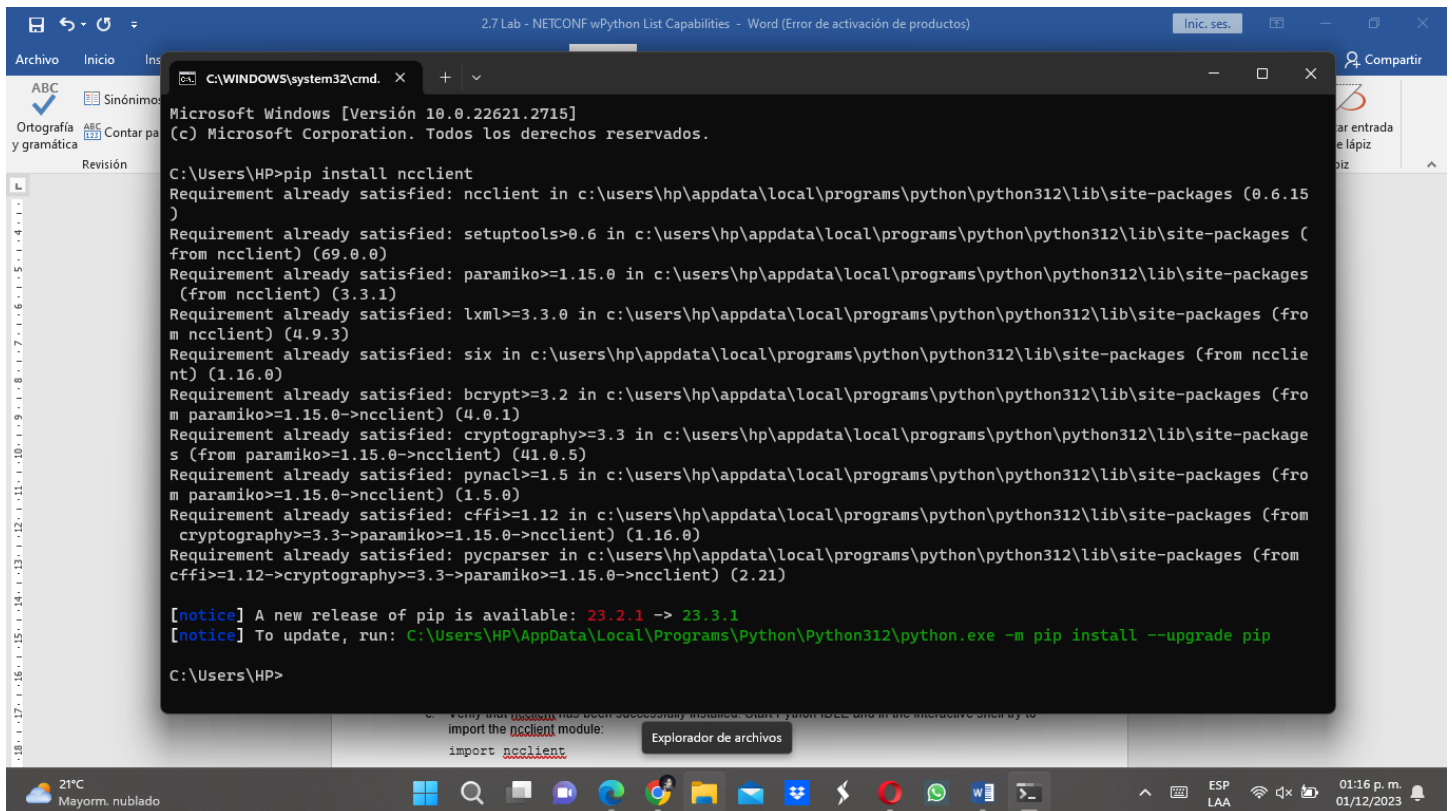
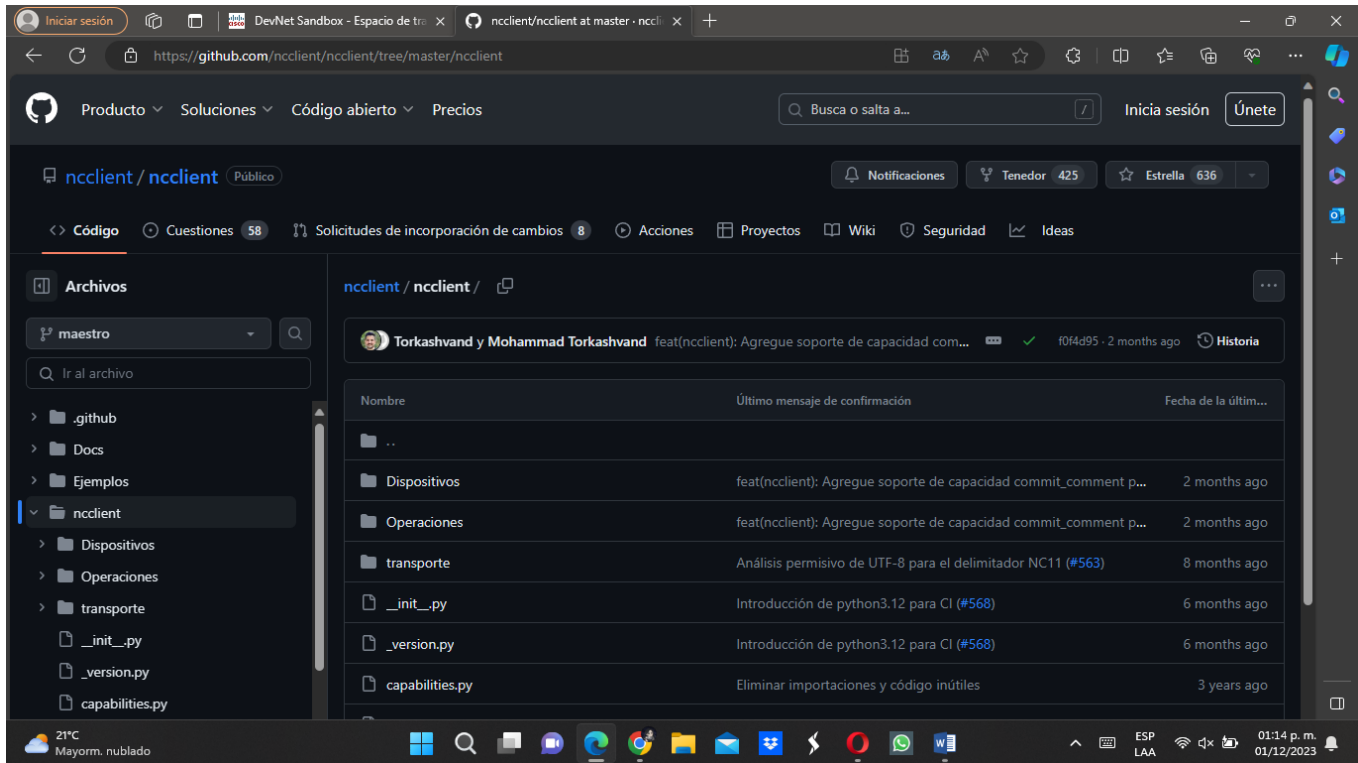
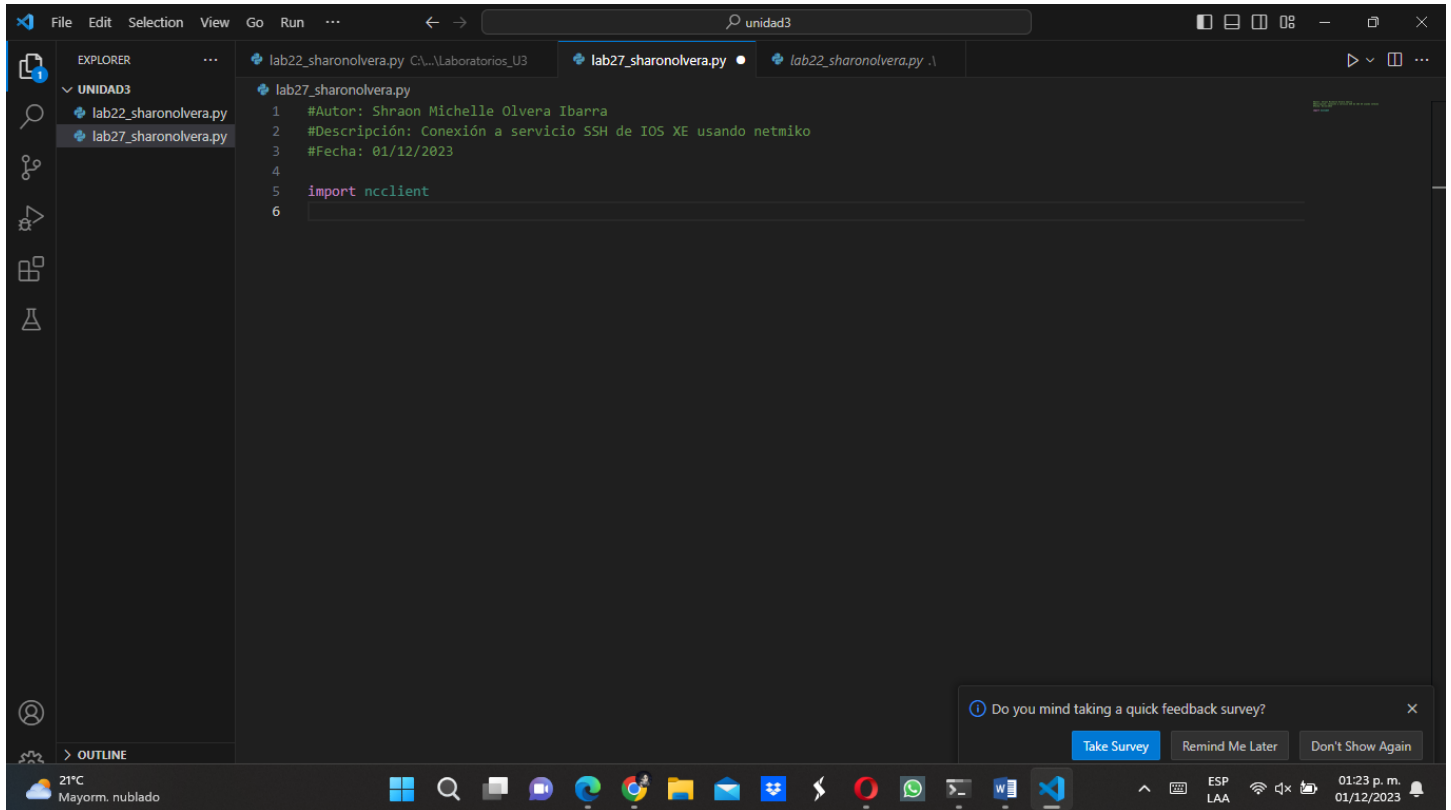


Lab 2.7 – NETCONF w/Python: List Capabilities

01/12/2023



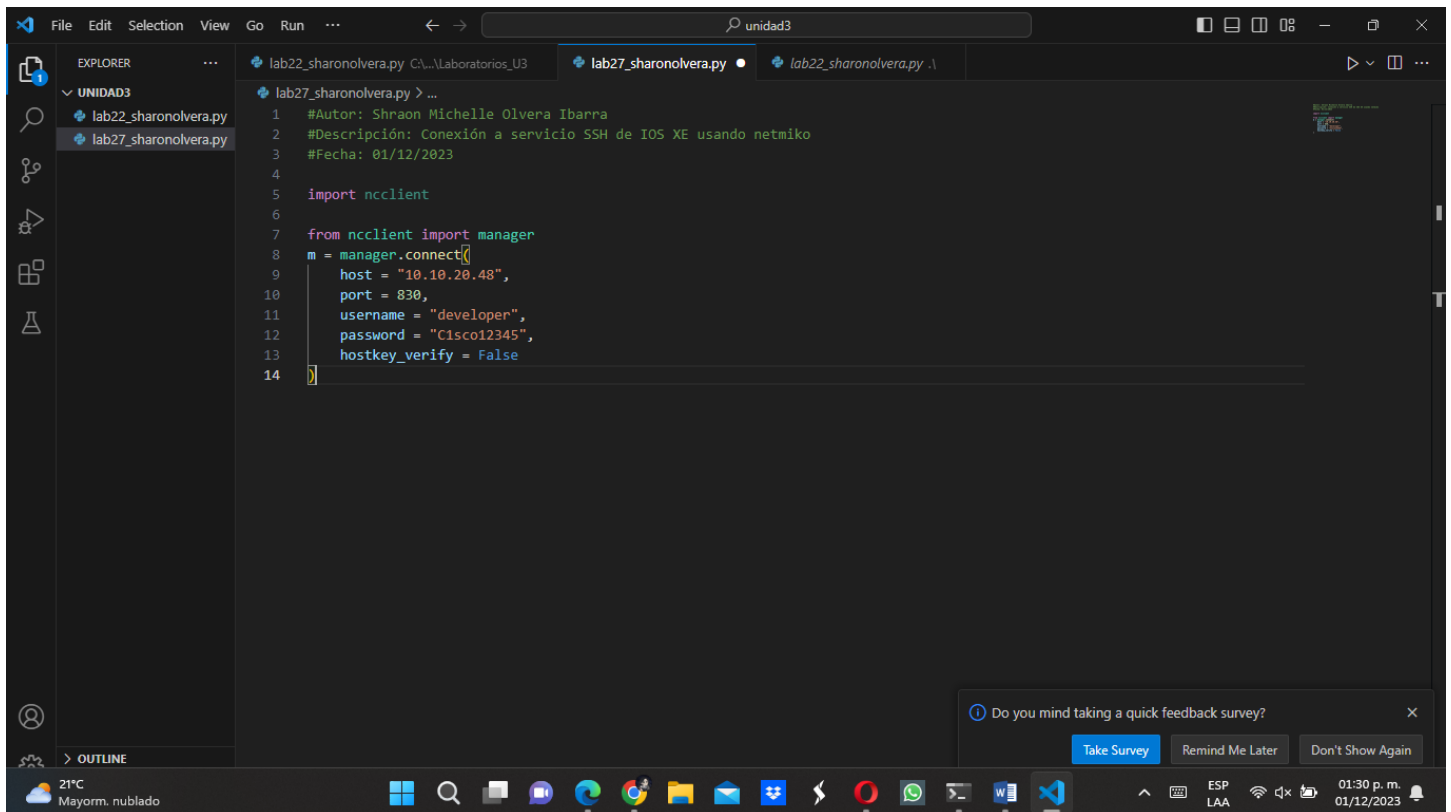
Olvera Ibarra Sharon Michelle



Visual Studio Code editor window showing a Python file named `lab27_sharonolvera.py`. The file content is as follows:

```
1 #Autor: Shraon Michelle Olvera Ibarra
2 #Descripción: Conexión a servicio SSH de IOS XE usando netmiko
3 #Fecha: 01/12/2023
4
5 import ncclient
6
```

The Explorer sidebar shows the file structure with `UNIDAD3` expanded, containing `lab22_sharonolvera.py` and `lab27_sharonolvera.py`. The status bar at the bottom indicates the temperature is 21°C and the weather is Mayorm. nublado. A feedback survey prompt is visible in the bottom right corner.



Visual Studio Code editor window showing the same Python file `lab27_sharonolvera.py`. The file content is now extended with connection parameters:

```
1 #Autor: Shraon Michelle Olvera Ibarra
2 #Descripción: Conexión a servicio SSH de IOS XE usando netmiko
3 #Fecha: 01/12/2023
4
5 import ncclient
6
7 from ncclient import manager
8 m = manager.connect(
9     host = "10.10.20.48",
10    port = 830,
11    username = "developer",
12    password = "Cisco12345",
13    hostkey_verify = False
14)
```

The Explorer sidebar and status bar remain the same as in the previous screenshot. The feedback survey prompt is also present.

```

1  #Autor: Shraon Michelle Olvera Ibarra
2  #Descripción: Conexión a servicio SSH de IOS XE usando netmiko
3  #Fecha: 01/12/2023
4
5  import ncclient
6
7  from ncclient import manager
8  m = manager.connect(
9      host = "10.10.20.48",
10     port = 830,
11     username = "developer",
12     password = "Cisco12345",
13     hostkey_verify = False
14 )
15 print("# Supported Capacidades (modelos YANG):")
16 for capacidad in m.server_capabilities:
17     print(capacidad)
18

```

```

PS C:\Users\HP\Desktop\unidad3> & C:\Users\HP\AppData\Local\Programs\Python\Python312\python.exe c:\Users\HP\Desktop\unidad3\lab27_sharonolvera.py
# Supported Capacidades (modelos YANG):
urn:ietf:params:netconf:base:1.0
urn:ietf:params:netconf:base:1.1
urn:ietf:params:netconf:capability:writable-running:1.0
urn:ietf:params:netconf:capability:rollback-on-error:1.0
urn:ietf:params:netconf:capability:validate:1.0
urn:ietf:params:netconf:capability:validate:1.1
urn:ietf:params:netconf:capability:xpath:1.0
urn:ietf:params:netconf:capability:notification:1.0
urn:ietf:params:netconf:capability:interleave:1.0
urn:ietf:params:netconf:capability:with-defaults:1.0?basic-mode=explicit&also-supported-report-all-tagged,report-all
urn:ietf:params:netconf:capability:with-operational-defaults:1.0?basic-mode=explicit&also-supported-report-all-tagged,report-all
urn:ietf:params:netconf:capability:yang-library:1.0?revision=2019-01-04&module-set-id=72c44eca39742896115d6c2b36780562
urn:ietf:params:netconf:capability:yang-library:1.1?revision=2019-01-04&content-id=72c44eca39742896115d6c2b36780562
http://tail-f.com/ns/netconf/actions/1.0
http://cisco.com/ns/cisco-xe-ietf-ip-deviation?module=cisco-xe-ietf-ip-deviation&revision=2016-08-10
http://cisco.com/ns/cisco-xe-ietf-ipv4-unicast-routing-deviation?module=cisco-xe-ietf-ipv4-unicast-routing-deviation&revision=2015-09-11
http://cisco.com/ns/cisco-xe-ietf-ipv6-unicast-routing-deviation?module=cisco-xe-ietf-ipv6-unicast-routing-deviation&revision=2015-09-11
http://cisco.com/ns/cisco-xe-ietf-ospf-deviation?module=cisco-xe-ietf-ospf-deviation&revision=2018-02-09
http://cisco.com/ns/cisco-xe-ietf-routing-deviation?module=cisco-xe-ietf-routing-deviation&revision=2016-07-09
http://cisco.com/ns/cisco-xe-openconfig-acl-deviation?module=cisco-xe-openconfig-acl-deviation&revision=2017-08-25
http://cisco.com/ns/cisco-xe-openconfig-aft-deviation?module=cisco-xe-openconfig-aft-deviation&revision=2018-12-05
http://cisco.com/ns/cisco-xe-openconfig-isis-deviation?module=cisco-xe-openconfig-isis-deviation&revision=2018-12-05
http://cisco.com/ns/cisco-xe-openconfig-lldp-deviation?module=cisco-xe-openconfig-lldp-deviation&revision=2018-07-25
http://cisco.com/ns/cisco-xe-openconfig-mpls-deviation?module=cisco-xe-openconfig-mpls-deviation&revision=2019-06-27
http://cisco.com/ns/cisco-xe-openconfig-segment-routing-deviation?module=cisco-xe-openconfig-segment-routing-deviation&revision=2018-12-05
http://cisco.com/ns/mpls-static/devs?module=common-mpls-static-devs&revision=2015-09-11
http://cisco.com/ns/nvo/devs?module=nvo-devs&revision=2015-09-11
http://cisco.com/ns/yang/Cisco-IOS-XE-aaa?module=Cisco-IOS-XE-aaa&revision=2022-07-01
http://cisco.com/ns/yang/Cisco-IOS-XE-aaa-actions-rpc?module=Cisco-IOS-XE-aaa-actions-rpc&revision=2021-07-01
http://cisco.com/ns/yang/Cisco-IOS-XE-aaa-events?module=Cisco-IOS-XE-aaa-events&revision=2021-07-01
http://cisco.com/ns/yang/Cisco-IOS-XE-aaa-oper?module=Cisco-IOS-XE-aaa-oper&revision=2021-07-01
http://cisco.com/ns/yang/Cisco-IOS-XE-acl?module=Cisco-IOS-XE-acl&revision=2021-07-01
http://cisco.com/ns/yang/Cisco-IOS-XE-acl-oper?module=Cisco-IOS-XE-acl-oper&revision=2021-03-01
http://cisco.com/ns/yang/Cisco-IOS-XE-app-hosting-cfg?module=Cisco-IOS-XE-app-hosting-cfg&revision=2022-07-01
http://cisco.com/ns/yang/Cisco-IOS-XE-app-hosting-oper?module=Cisco-IOS-XE-app-hosting-oper&revision=2022-07-01
http://cisco.com/ns/yang/Cisco-IOS-XE-arn?module=Cisco-IOS-XE-arn&revision=2019-07-01

```

- a. Is the Cisco-IOS-XE-cdp YANG model supported by the device? No, el modelo Yang no es compatible con el dispositivo