LAB 6 – Python Network automation with netmiko

Search for a script to work and communicate with Cisco IOS network devices using netmiko.

Start with a simple script and try to extend your script with additional functions.

Part 1: Connecting to a single iOS device
- Sending single show command
- -Sending multiple show commands
- Send multiple configuration commands to a single device

Part 2: Connect to multiple IOS devices
- Send show commands to multiple devices
- Send configuration commands to multiple devices
- Run show commands and save the output
- Backup the device configurations
- Configure a subset of Interfaces
- Send device configuration using an external file
- Connect using a Python Dictionary
- Execute a script with a Function or classes
- Execute a script with a statements (if, ifelse, else)

Part 3: Connect to IOS-XE devices
- Send show commands to multiple devices
- Send configuration commands to multiple devices
- Run show commands and save the output
- Backup the device configurations
- Configure a subset of Interfaces
- Send device configuration using an external file
- Connect using a Python Dictionary
- Execute a script with a Function or classes
- Execute a script with a statements (if, ifelse, else)

Part 4: Create an challenging excited script as a network

- Create an exciting and challenging script that a network engineer in a programmable era would use every day. Surprise your lecturer!

Document your findings and important commands.