**Unit Twelve Lab**

Directions: Complete each of the scripts below and submit them by the date specified in the assignment sheet and Blackboard. Submit **copies of your code** and **screenshots of the code running with each task**. Also, be sure to use the document, **Script Requirements as a guide** to writing good code. **Full credit will not be earned if you do not meet these script requirements.** **40 points**

1. Using appropriate modularization, create a dictionary of appropriate values for your two IOS XE devices. Iterate that dictionary, and retrieve a list of interfaces from each device, using NETCONF. Print a list of the retrieved interfaces, addresses, and masks for each device in a human readable form that clearly identifies the device that the interfaces are from (Hint: It may be easier to convert the XML to an ordered dictionary to do this script). You will also want to filter out loopback addresses that have no IP address, using an “if” statement and using the type key to help you determine if you should print an interface or not.
2. Write a script that asks a user for an IP address of an IOS XE device. Query the device with NETCONF and return a human-readable report of interface names, IP addresses, and masks. Ask the user for an interface to update (or none), and then ask for an IP address and mask. Validate all inputs. Finally, use the template script for this week with the xmlInt string and modify the values in the string before updating the interface. Proper modularization with functions must be used in this lab.