

discovering-topology.py

This Python script is an earlier version of topology-tracing.py and performs traceroute by sending ICMP packets to a specified host, incrementing the TTL (time-to-live) value in each packet and printing the IP addresses of intermediate hops until it reaches the destination host or the maximum TTL is reached.

sub.py

This Python script imports the subprocess module to run a traceroute script (topology-tracing.py) for a list of specified IP address ranges by iterating through the IP ranges, launching the traceroute script for each range, and handling potential errors during execution.

topology-graphing.py

This Python script uses the NetworkX library to graph the network topology based on traceroute results stored in a JSON file - it loads the traceroute results from the specified JSON file, constructs a network graph where nodes represent IP addresses and edges represent the connections between them, and finally uses Matplotlib to visualize the network graph as a graph diagram with labeled nodes.

topology-graphing1.py

This Python script is an earlier version of topology-graphing.py and attempts to perform a traceroute for the given IP address in the trace_route function, and then in the main part of the script it uses the NetworkX library to display the network graph with labeled nodes and edges.

topology-tracing.py

This Python script performs traceroute to a range of IP addresses in a specified range via multithreading and then stores the results in a JSON file.