import logging

import argparse

from scapy.all import sniff, TCP, UDP, ICMP, IP

# Set up logging

logging.basicConfig(level=logging.INFO, format='%(asctime)s - %(levelname)s - %(message)s')

# Protocol mapping

protocol\_map = {

6: "TCP",

17: "UDP",

1: "ICMP"

}

def get\_protocol\_name(protocol):

"""Return the protocol name from the protocol number"""

return protocol\_map.get(protocol, "Unknown")

def packet\_sniffer(packet):

"""Callback function for each packet sniffed"""

try:

if packet.haslayer(IP):

src\_ip = packet[IP].src

dst\_ip = packet[IP].dst

protocol = packet[IP].proto

packet\_length = len(packet)

protocol\_name = get\_protocol\_name(protocol)

logging.info(f"Source IP: {src\_ip}")

logging.info(f"Destination IP: {dst\_ip}")

logging.info(f"Protocol: {protocol\_name}")

logging.info(f"Packet Length: {