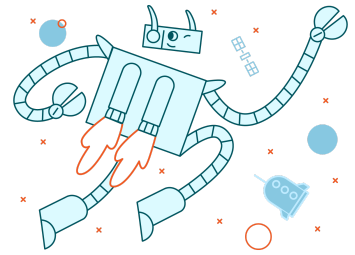


# Next Hop



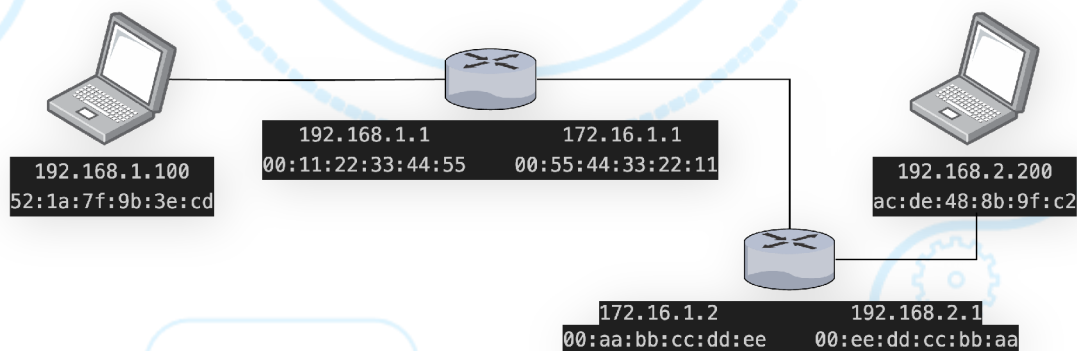
## Objective

In this exercise, you will analyze a network diagram and fill in a table with the source and destination IP and MAC addresses at each hop as a packet traverses from the source to the destination.

## Background

When a packet is sent from a source device to a destination device across a network, it goes through several intermediate devices (routers) before reaching its final destination. At each hop, the IP addresses remain the same, but the MAC addresses change as the packet is forwarded from one device to the next.

## Network Diagram



# Task

## A to B

Fill in the table below with the source and destination IP and MAC addresses at each hop as a packet is sent from device A to device B.

Hop	Source IP	Destination IP	Source MAC	Destination MAC
1				
2				
3				

## B to A

Now B sends a reply packet back to A. Fill in the table below with the source and destination IP and MAC addresses at each hop as a packet is sent from device B to device A.

Hop	Source IP	Destination IP	Source MAC	Destination MAC
1				
2				
3				

Explain how the IP and MAC addresses change at each hop and why.

## To submit

A text file containing the filled table and an explanation.