Here's a complete guide for the **Simulation of ARP/RARP packets** in **Cisco Packet Tracer**, including **Aim, Introduction, Device Requirements, Configuration Details**, and **Step-by-Step Process**.

✔ AIM

To simulate and analyze **ARP (Address Resolution Protocol)** and **RARP (Reverse ARP)** operations using **Cisco Packet Tracer** by observing how IP and MAC address mappings occur in a local network.

INTRODUCTION

- **ARP (Address Resolution Protocol):**
  Used to find the MAC (hardware) address of a device when its IP address is known. ARP is crucial for communication within the same network.
- **RARP (Reverse Address Resolution Protocol):**
  Used by a device to obtain an IP address using its MAC address. It's mostly outdated and replaced by DHCP in modern networks.

> 📝 **Note: Cisco Packet Tracer does not explicitly support RARP configuration, but we simulate the concept by observing how a device gets an IP via DHCP.**

□ DEVICE REQUIREMENTS

Device	Quantity
PCs	2
Switch	1
Router (Optional, for DHCP/RARP concept)	1
Copper Straight-Through Cable	3–4 cables

⚙ CONFIGURATION DETAILS

Device	IP Address	Subnet Mask
PC0	192.168.1.1	255.255.255.0
PC1	DHCP (for RARP)	Assigned Dynamically

📌 Conclusion

- **ARP** resolves IP to MAC.
- **RARP** (simulated via DHCP) resolves MAC to IP.
- Cisco Packet Tracer lets you observe these protocols using simulation mode and helps understand how devices communicate within a network.