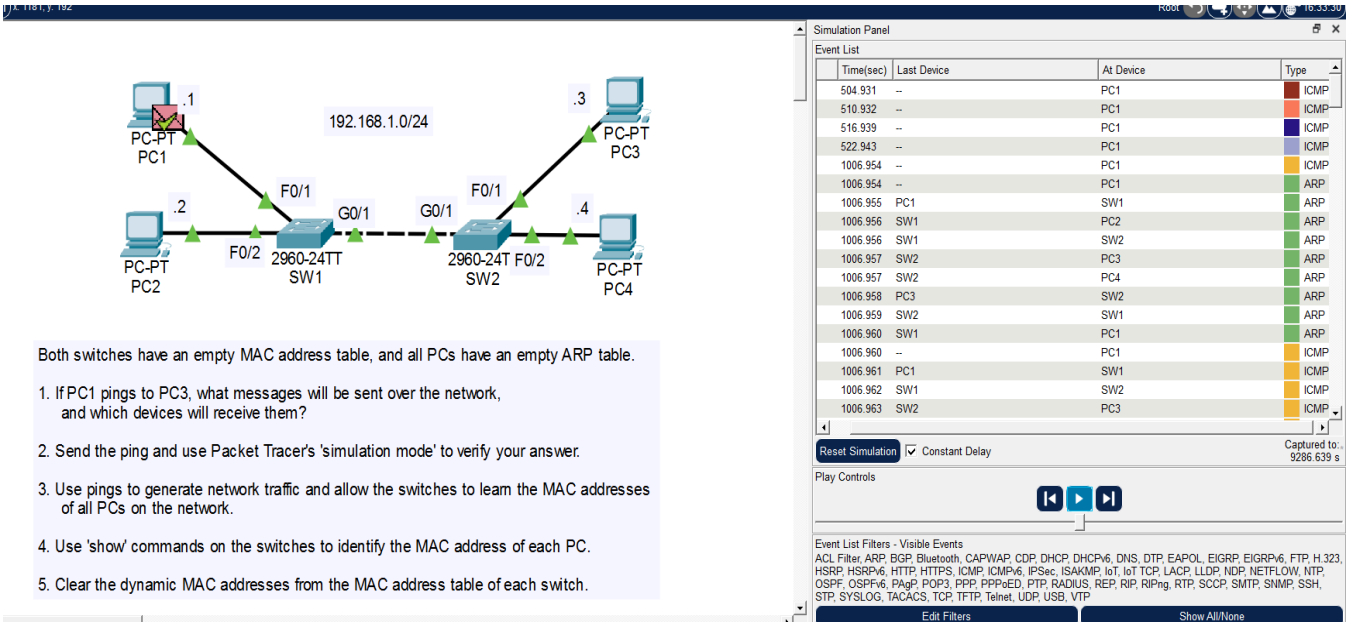
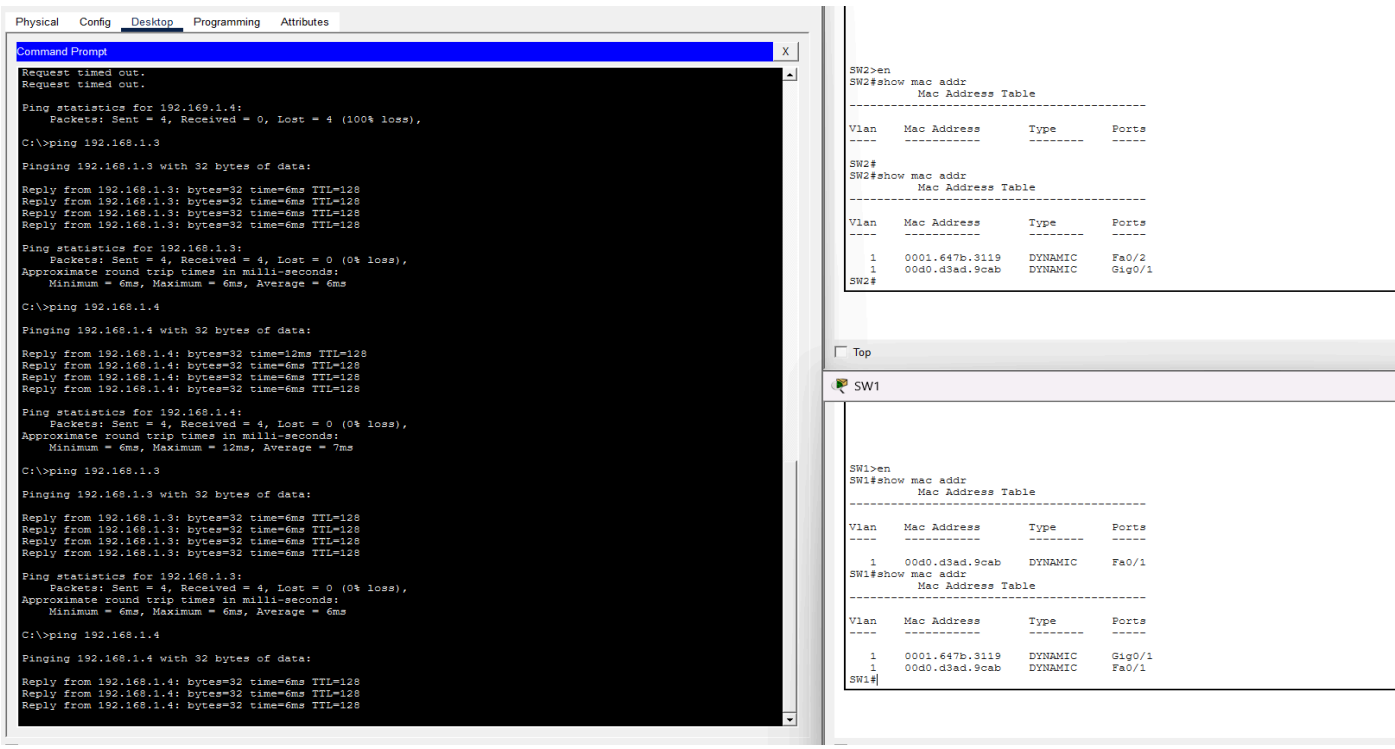
Day 1 lab



For the first question in this lab, to what devices will messages be sent and which devices will receive them. Answer to the question is **arp request** will be **sent to** all the devices all over the network **by pc1** which are - **sw2, pc2,pc3,pc4.** and pc3 will receive the arp request and will give arp reply.

Further **icmp echo requests will be sent to pc3 and icmp echo reply will be received by pc1.**

You can see the process in the stimulation above how the packet is transferred by arp to all devices at first then icmp request followed after arp reply.



In the above image, **pc3 is pinged through p1** with an ip address. While stimulating the packet, the switch learns the mac address. You can notice that switch1 learns the source mac address from the pc1 interface first and then switch 2 learns source mac address from sw1 interface . After receiving the packet sw2 learns the destination mac address through the p3 interface then sw1 learns through switch 2 interface. *Command used - show mac addr.*

This is how all PCs can learn each other's mac addresses.

Last step- You can clear mac addresses by using command- clear mac address-table dynamic.

Although they get cleared automatically, you don't get a chance to do it :(