CDP (Cisco Discovery protocol) and LLDP (Link Layer Discovery Protocol)

**Cisco Discovery Protocol (CDP)**
- Cisco proprietary
- Layer 2 protocol for neighbor discovery
- Provides information of platform, interface, IP address, and OS version
- Equivalent to the open standard LLDP
- Helps with preparing network diagram

**Configuration**
- Enabling CDP:
  - `Router(config)# cdp run`
  - `Router(config)# cdp timer <seconds>`
- Disabling CDP:
  - `Router(config)# no cdp run`
  - `Router(config-if)# no cdp enable`

HP switch connected between Cisco's R1 and R2 when it receives the 01:00:0c:cc:cc:cc MAC (Multicast Address) it floods it out on all the ports, and then R1/R2 will think they are directly connected, which is misleading so use LLDP on those ports. This MAC address is used by CDP/VTP/DTP/PAgP/UDLD.

LLDP uses a Multicast MAC address of 01:80:c2:00:00:0e

It carries the information in Type link value (TLV) Field. LLDP has an extension MED (Media Discovery Protocol) that carried more information.
!(Enabled by default)
R(config)#cdp run
R(config)#cdp timer 5 !(5 secs instead of default 60 secs)
R(config)#cdp holdtime 35 !(32 secs instead of default 180 secs)
R(config)#no cdp run
R(config-if)#cdp enable
R(config-if)#no cdp run !(turn it off on ports it is not needed | security measure)
!(lldp has same commands as cdp, just use lldp instead of cdp in the same commands)
R(config-if)#lldp receive !(receive only)
R(config-if)#lldp transmit !(transmit only)
R(config-if)#no lldp receive
R(config-if)#no lldp transmit

**Verification and TshOOT command:**
(always check both cdp and lldp)(lldp commands contains more information)
sh cdp
sh cdp neigh
sh cdp neigh detail
sh cdp neigh fo/0 detial
sh cdp entry *
sh cdp entry SW*
sh cdp int
sh cdp int fo/0
sh cdp traffic