Network Configuration

1. Assign IP on routers
   1. In config terminal, configure hostname
   2. In config terminal, configure interface for port (f0/0, f0/1, etc.)
   3. In port interface set IP address and subnet mask. (ip address 172.16.1.1 255.255.255.0)
   4. No shutdown (optional)
   5. Configure interface for serial port (external, s0/3/0 for example)
   6. Do the same for all downstream routers, like ISPs
2. Configure DHCP server on local routers
   1. In configure terminal, go to ip (ip dhcp …)
   2. Establish ip address excluded from the DHCP range. Use exclude-address command
   3. Name dhcp pool. This will take you to dhcp-config
   4. Set network ID. (network 172.16.100.1 255.255.255.0)
   5. Configure default gateway with default-router command
   6. Configure dns server with dns-server command.
3. Configure Default on client side router and static from ISP
   1. In configure terminal, use ip route command. (ex. ip route 0.0.0.0 0.0.0.0 $(ip of isp router))
   2. In ISP router, set ip route 172.16.100.0 255.255.255.0 $(ip of router, like 203.1.1.2))
   3. show ip route will show configurations (in privilege shell)
4. Configure interface inside and out
   1. Enter interface for inside network. Should be a fx/x port. Use ip nat inside command
   2. Enter interface for outside network. Should be int sx/x/x, and set nat to outside
5. Create Access list 100 on Local router
   1. In configure terminal, set access-list 100 permit ip any any
6. Call access list
   1. On same router, use ip nat inside source list 100 interface sx/x/x overload