Project Summary: Cisco Network Configuration

- **Equipment Used**: 4 PCs, 2 Cisco switches, 1 Cisco router,

- **Connections**:

  - PCs connected to switches via copper straight-through cables.
  - Switches connected to the router using Gigabit Ethernet ports (g0/0 and g0/1).

- **Initial Setup**:

  - Encountered red lights indicating no connection; needed to enable router ports, which are disabled by default.
  - Accessed router CLI and entered privileged mode.

- **Configuration Steps**:

  To configure the gigabit ports on the router, I declined the initial configuration offer by typing **no** and pressing Enter. Then, I entered privileged mode by typing **enable** and pressing Enter, followed by another Enter. Next, I accessed global configuration with **configure terminal.** I configured the first port by typing **interface g0/0** and pressing Enter. I assigned the IP address by typing **ip address 192.168.1.1 255.255.255.0** and pressing Enter. Cisco routers are turned off by default, so I typed **no shutdown** and pressed Enter. Finally, I typed **exit** and pressed Enter to complete the configuration for the first port. I repeated the process for the other port. Summary of what I did on the CLI:

  - Configured Gigabit port g0/0 with IP address **192.168.1.1/24** and enabled it.
  - Configured Gigabit port g0/1 with IP address **192.168.2.1/24** and enabled it.

- **PC Configuration**:

  - Assigned static IP addresses to PCs in the **192.168.1.x** and **192.168.2.x** ranges with the corresponding subnet masks and default gateways.
  - Tested connectivity by sending PDU from PCs across the network.

- **Outcome**: Successfully established communication between PCs on different broadcast domains, confirming proper configuration of the network.

- **Note**: This was a basic setup without advanced configurations like firewall rules or DNS.

Diagram of configured network: