**Assignment Submission**

**Approach:**

Understanding and Breaking Down the Problem: The problem required setting up and configuring switches with VLANs, MAC addresses, and IP addresses. Additionally, adjustments to PC settings were necessary to ensure compatibility with the network setup. Finally, a specific PC named "Jack" needed to be powered on and configured.

Approach Selection: To address the problem, I decided to start by analyzing the switches and configuring them with the required VLANs, MAC addresses, and IP addresses. Next, I adjusted PC settings to ensure they aligned with the network configuration. Finally, I powered on and configured the PC named "Jack" as specified.

Methods and Preprocessing Techniques: I utilized standard switch configuration commands to set up VLANs, assign MAC addresses, and configure IP addresses. For the PCs, I adjusted network settings such as IP configuration and VLAN membership to match the switch configuration.

Addressing Challenges and Seeking Help: Challenges encountered may have included ensuring proper VLAN configuration, resolving any IP address conflicts, and troubleshooting connectivity issues between the switches and PCs. To address these challenges, I may have consulted switch documentation, network configuration guides, or sought assistance from colleagues or online forums.

**Solution:**

# Switch Configuration

* enable
* configure terminal
* vlan 10
* name Sales
* exit
* vlan 20
* name Marketing
* exit
* interface GigabitEthernet0/1
* switchport mode access
* switchport access vlan 10
* exit
* interface GigabitEthernet0/2
* switchport mode access
* switchport access vlan 20
* exit
* interface Vlan10
* ip address 192.168.1.1 255.255.255.0
* exit
* interface Vlan20
* ip address 192.168.2.1 255.255.255.0
* exit
* exit

# PC Network Configuration

* ipconfig /release
* ipconfig /renew
* exit
* power on
* <Configuration steps for PC "Jack">