***THE SUPERIOR UNIVERSITY***

**COMPUTER NETWORKINGS**

**ASSIGNMENT NO 2**

**SUBMITTED TO**

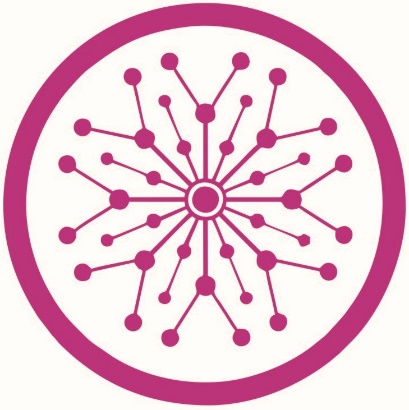
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**Lab task 2**

**Task 1:Why are we using 2911 router and not the others?**

**Answer:**  **Performance**:

The Cisco 2911 offers a good balance of performance for small to medium-sized networks, with capabilities to handle multiple services simultaneously, such as routing, security, and voice.

 **Modularity**:

It supports various interface cards and modules, allowing for customization based on specific network needs. This flexibility makes it suitable for diverse applications.

 **Advanced Features**:

The 2911 includes features like VPN support, firewall capabilities, and advanced security, making it a strong choice for secure network configurations.

 **Scalability**:

As your network grows, the 2911 can be expanded with additional modules, making it easier to adapt without a complete hardware replacement.

 **Cost-Effectiveness**:

Compared to higher-end models, the 2911 offers robust capabilities at a lower cost, making it suitable for smaller enterprises and educational environments

**Task 2; Why are we using 2950T or 2960 switch and not the others?**

**Answer:**  **Layer 2 Switching**:

* Both the 2950T and 2960 are Layer 2 switches, providing essential switching capabilities for local area networks (LANs), which is often all that is needed for many setups.

 **Port Density**:

* They offer a good number of ports (usually 24 or 48), allowing for connection of multiple devices in a single rack unit, which is ideal for classroom and lab environments.

 **VLAN Support**:

* The 2960 supports VLANs (Virtual Local Area Networks), enabling better network segmentation and improved traffic management, which is crucial for modern networks.

 **Power over Ethernet (PoE)**:

* The 2960 can provide PoE, allowing you to power devices like IP phones and wireless access points directly through the Ethernet cable, simplifying installations.

 **Reliability**:

* Both switches are known for their stability and reliability, making them suitable for educational and enterprise environments.

 **Ease of Use**:

* They are relatively straightforward to configure and manage, making them ideal for training environments where students are learning networking fundamentals.