**Computer Network Lab**

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**Submitted to Sir Rasikh**

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**Roll # SU92-BSSEM-F22-090**

**Section 4B**

**Department of Software Engineering**

**Superior University, Lahore**

**Task no 2**

**Question no 1:-**

The Cisco 2911 router is commonly used because it offers:

1. Versatility: Supports voice, video, and data services.
2. Integrated Services: Provides routing, security, and WAN services.
3. Multiple Interfaces: Has multiple Gigabit Ethernet ports.
4. Expandability: Slots for future upgrades (e.g., interface cards).
5. Performance: Suitable for mid-sized networks like Lab-7 or Lab-8.

Other routers either lack the necessary features (lower-end) or are overpowered for small lab setups (higher-end). The 2911 is a balanced choice for such networks.

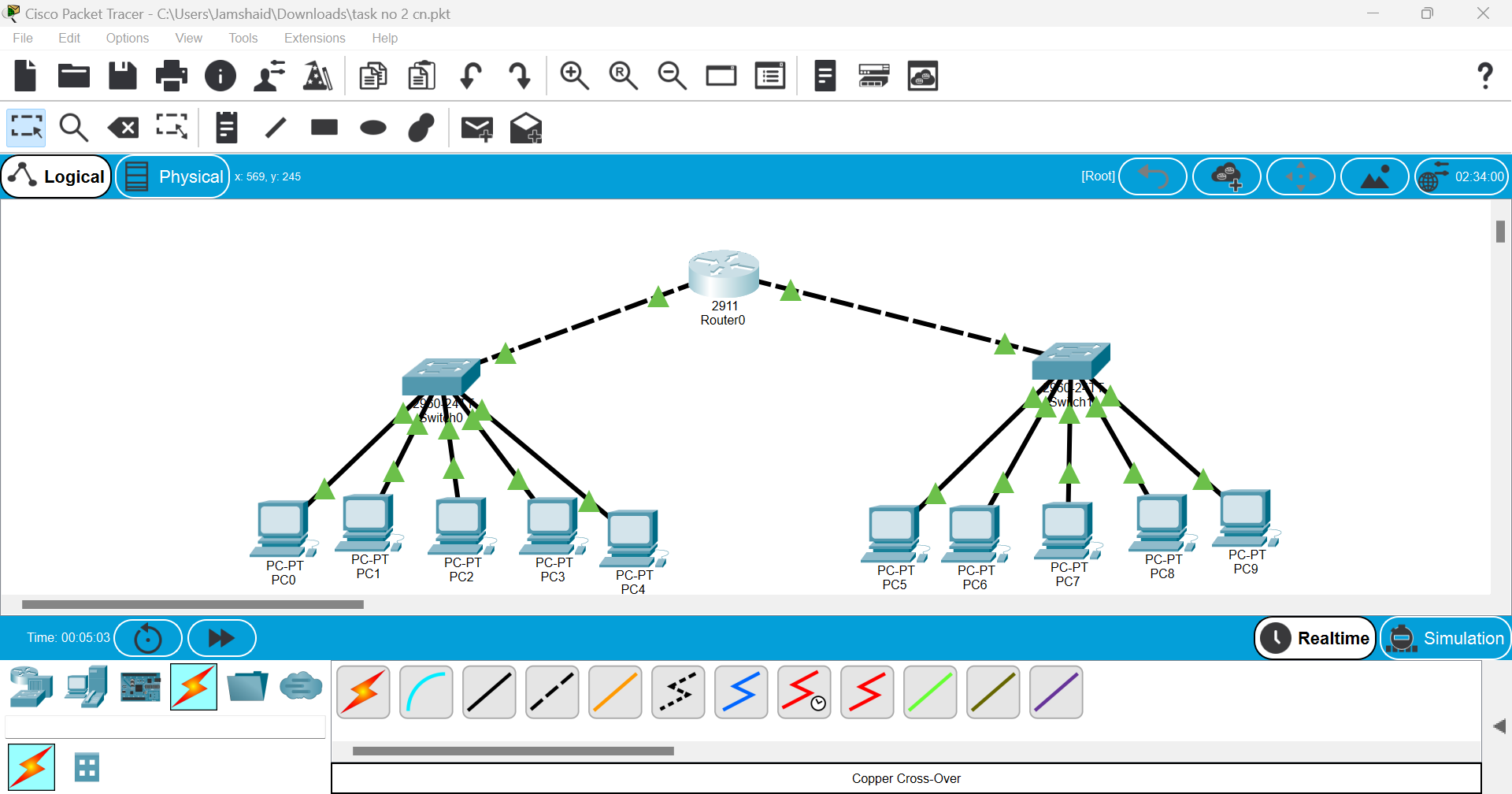
**Question no 2:-**

We use Cisco 2950T or 2960 switches because they offer:

1. Layer 2 Switching: Ideal for basic network setups, handling VLANs, MAC address learning, and frame switching.
2. Cost-Effective: Affordable for small to medium networks like Lab-7 or Lab-8.
3. Sufficient Ports: Typically have enough Fast/Gigabit Ethernet ports for connecting multiple devices.
4. Reliability: Proven performance and widely used in enterprise and educational networks.

Higher-end switches provide more advanced features (like Layer 3 routing), which are unnecessary for simple lab networks.

**Question no 3:-**

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