Misconceptions

Module-1	
Misconception 1.	**Computer networks primarily include the interconnection of several computing devices.**
Correct Explanation	The act of establishing connections between devices is a basic aspect of networking. However, computer networks have a broader scope that includes protocols, data transfer mechanisms, addressing schemes, and the facilitation of dependable communication, among several other elements.
Misconception 2.	**LANs are always very small and confined to a single room or building.**
Correct Explanation	Local Area Networks (LANs) are often confined to a limited geographical region, however they have the capability to extend over many buildings within a campus or a large office complex.
Misconception 3.	**IP addresses and MAC addresses are equivalent.**

Correct Explanation	IP addresses are a kind of logical addresses that have the ability to alter depending on the network to which a device is connected. On the other hand, MAC addresses are physical addresses that are hardcoded and distinct for each network interface card.
Misconception 4.	**The transport layer only focuses on the transmission of data.**
Correct Explanation	The transport layer is responsible for managing end-to-end communication, performing error checking, sequencing data, implementing flow control mechanisms, and other related tasks to guarantee the reliable transmission and reception of data.
Misconception 5.	**Socket programming mostly caters to the development of intricate and expansive applications.**
Correct Explanation	Socket programming is an essential technique used in network communication, serving as a fundamental tool for many tasks ranging from establishing basic server-client interactions to implementing intricate applications.