Department of Computer Engineering

Faculty of Computers and Information Technology
University of Tabuk,
Tabuk, Kingdom of Saudi Arabia

LAB WORK-2

Submitted by

Name	Rayan Albalawi
Register Number	411005268
Due Date	
Grade	/2

Question:

Write different network comments and describe its functionality.

1. **ipconfig** :

   - Functionality: Displays detailed information about all network interfaces on the Windows computer, including IP addresses, subnet masks, and DNS server settings.

2. **ping [hostname or IP address]**:

   - Functionality: Sends ICMP echo requests to test network connectivity to a specific host or IP address.

3. **Hostname:**

   - To communicate with each and other, the computer needs a unique address. A hostname can be alphabetic or alphanumeric and contain specific symbols used specifically to define a specific node or device in the network.

4. **netstat** :

   - Functionality: Displays a list of all active network connections, including listening ports and their associated IP addresses and protocols.

5. **ipconfig /release** and **ipconfig /renew**:

   - Functionality: Releases and renews the DHCP-assigned IP address of the network interface, useful for troubleshooting network connectivity issues.

6. **Tracert**:

    - The tracert command is a Command Prompt command which is used to get the network packet being sent and received and the number of hops required for that packet to reach to target. This command can also be referred to as a traceroute. It provides several details about the path that a packet takes from the source to the specified destination.