TCP (Transmission Control Protocol) and UDP (User Datagram Protocol) are both transport layer protocols used for data transmission over networks. Here's a comparison:

* **Microsoft Teams (or any real-time communication like VoIP, video calls, and gaming)** primarily uses **UDP** because it prioritizes speed over reliability. UDP allows for low-latency communication, even if some packets are lost.
* **Email (SMTP, IMAP, POP3)** uses **TCP** because emails must be delivered reliably and in order, ensuring no data loss or corruption.

**1. Connection vs. Connectionless**

* **TCP**: Connection-oriented (establishes a connection before sending data).
* **UDP**: Connectionless (sends data without establishing a connection).

**2. Reliability**

* **TCP**: Reliable, ensures data is delivered in order and without errors using acknowledgments and retransmissions.
* **UDP**: Unreliable, does not guarantee delivery, order, or error checking.

**3. Speed & Performance**

* **TCP**: Slower due to connection setup, error correction, and congestion control.
* **UDP**: Faster as it does not involve connection setup or error recovery.

**4. Ordering of Data**

* **TCP**: Maintains proper sequence of data.
* **UDP**: No sequencing; packets can arrive out of order.

**5. Overhead**

* **TCP**: Higher overhead due to additional features like error checking and acknowledgments.
* **UDP**: Lower overhead, making it lightweight.