Task 1:

Topic	TCP or UDP	Reason
Reliability and Connection Establishment	TCP	Connection oriented with 3-way handshake (SYN, SYN-ACK, ACK). Retransmissions and acknowledgments provide reliability. UDP is connectionless.
Data Integrity and Ordering	TCP	Sequence numbers and reassembly deliver data in order. Lost data is detected and resent. UDP has only an optional checksum and no ordering.

Task 2:

	TCP	UDP
Use cases	Web HTTP/HTTPS, email SMTP/IMAP/POP3, file transfer FTP/SFTP, SSH, databases and APIs	DNS, VoIP, live streaming, online gaming, NTP, DHCP, syslog, HTTP/3 with QUIC
Performance	More overhead and latency due to handshake and ACKs.	Very low overhead and latency. Packets can drop

	Reliable delivery and steady throughput	or arrive out of order. Good for real time