**In class activity - Ch.3 (3.1 Transport layer; 3.2 Multiplexing and Demultiplexing)**

1. Transport layer=provides logical communication between 2 processes in 2 hosts

vs.

Network layer = provides logical communication between 2 hosts (see ex. with letters and cousins)

* TL protocols are in end systems, NOT routers
* Uses IP (a “best effort delivery”) at network layer
* Produces segments
* UDP and TCP

|  |  |
| --- | --- |
| **TCP** | **UDP** |
| 3-way handshake connection | Connectionless |
| Reliable | x |
| Has congestion control | x |
| Persistent (by default) | x |
| Takes 2RTT | 1 RTT |
| TCP socket: (srcPort# + srcIP + dstPort# + dstIP) | UDP socket: (dstPort# + dstIP ) |
|  |  |

1. TL multiplexing (a) and demultiplexing (b)
   1. = packages data from many sockets in segments ready to be sent over IP (NL)
   2. = sends to the correct socket the segments received over IP (NL)
2. Port # - on 16bits 🡺 0-65,535 (RFC 1700)