**Worksheet 8 - Reliable data transfer (RDT)**

You have to send the following message:

*Subject of computer networking is complex.*

Assume each word is sent in a separate packet.

1. Consider your network that provides rdt 1.0 service. Draw the timeline between sender and receiver.

1. Consider your network that provides rdt 2.0 service. Draw the timeline between sender and receiver assuming all messages reach the receiver with no errors.
2. Consider your network that provides rdt 2.0 service. Draw the timeline between sender and receiver assuming all messages reach the receiver where packets containing the word “computer” has errors in 2 consecutive transmissions.
3. Consider your network that provides rdt 2.1 service. Draw the timeline between sender and receiver assuming all messages reach the receiver where packet containing the ACK for the word “computer” reaches garbled.

Hint: rdt 2.1 uses 2 sequence numbers 0 and 1.

1. Consider your network that provides rdt 2.2 service. Draw the timeline between sender and receiver assuming all messages reach the receiver where packet containing the word “computer” has errors.

Hint: rdt 2.2 has no NACK.

1. Consider your network that provides rdt 3.0 service. Draw the timeline between sender and receiver assuming messages can be lost for the following scenarios:
   1. Packet with word “computer” is lost
   2. ACK for packet containing “computer” is lost
   3. ACK for packet containing “computer” arrives after sender times out.

Hint: rdt 3.0 also uses 2 sequence numbers 0 and 1.`