Protocol E: One-Bit Sliding Window Protocol (OBSPW)
(bidirectional data exchange, similar to PAR)
(sender and receiver are identical)

seqnum = 0
expectedseqnum = 0

get initial AL data from socket
construct TL segment (including header, seqnum, acknum, checksum)
give segment to NL to transmit
start retransmission timer

Repeat forever

Wait for event

1. valid segment
2. invalid segment
3. timer expiration

If valid segment
Then get segment from NL
If receivedseqnum = expectedseqnum
Then remove TL header from segment
deliver data to AL socket
update expectedseqnum (i.e., expectedseqnum = 1 - expectedseqnum)
If receivedacknum = seqnum
Then get next new data from AL socket
cancel timer
update seqnum (i.e., seqnum = 1 - seqnum)

Construct TL segment (including header, seqnum, acknum, checksum)
give segment to NL to transmit
start retransmission timer