Part B (the program used is included in part B folder)
(1) The congestion window sizes are shown in the figure below. The congestion window is estimated at the sender side. The reason is data is transmitted from sender to receiver. Sender changes the size on the basis of replying situations.

For all the three flows, the initial window size is ten. For calculating the window sizes, the RTTs are determined first. RTT is the time interval between the sent and received packet when TSecr in the received packet is the same as the TSval in the sent. When counting the next window size, start from the sent packet after the previous received packet who has the same TSecr as the previous TSval in the sent.

```
Port 43498 :
CWND grows like: [10, 20, 33, 45, 67, 102, 133, 203, 271, 409]
Retransmission situation is calculating: ...
Retransmission due to triple duplicate ack: 2
Retransmission due to timeout: 2
========================================
Port 43500 :
CWND grows like: [10, 20, 33, 45, 67, 102, 133, 203, 271, 407]
Retransmission situation is calculating: ...
Retransmission due to triple duplicate ack: 4
Retransmission due to timeout: 91
========================================
Port 43502 :
CWND grows like: [10, 20, 33, 45, 68, 89, 133, 181, 147]
Retransmission situation is calculating: ...
Retransmission due to triple duplicate ack: 0
Retransmission due to timeout: 1
```

(2) The retransmissions for each flow are shown in the figure above. When there is a retransmission, check whether there are more than three replies before it. If there are, and acks are the same as the seq in the retransmission, then it is a retransmission due to triple duplicate ack. Similarly, if retransmission happens and there is no reply between the initial and this retransmission, then this is due to timeout.