

## **Recitation 4: Group exercises**

1.TCP

2.HTTP

3.Ethereal capture

## 1. TCP

- TCP is connection-oriented. Do the segments follow the same path?
- When are the following bits used?
  - URG
  - PSH
  - RST
- Which of the following consume a sequence number in three-way handshaking?
  - SYN
  - SYN + ACK
  - ACK
- What is a SYN flooding attack?
- Describe MSL.
- Explain the difference between receiver window (rwnd) and congestion window (cwnd).
- What is Silly Window Syndrome.
- Explain cumulative and selective acknowledgements?
- When is a segment retransmitted?
- Explain (a) slow start and (b) congestion avoidance.
- Why does TCP need persistence and keepalive timers?
- Which of the options in TCP is used in PAWS (protection against wrapped sequence numbers)?

## **2. HTTP**

Browse some websites, show their source pages and use ethereal to view the HTTP requests and responses.

### **3. Ethereal capture**