Homework #2

(Due on 12:00am, Thursday, Nov. 11th, 2010)

1. CRC checksums: Please calculate the CRC R of $D = 0101\ 1100\ 1010\ 0111\ 1110\ 1111$. Please use the 4 bit generator $G = 1101$

2. Why do we need multiple identifiers for one entity such as IP-addresses, MAC addresses etc.?

3. Please revisit the Address Resolution Protocol (ARP). What happens, if you want to connect to a host that is not in your local area network?

4. Please look into the Ethernet frames using wireshark and, in the best case scenario, observe an ARP request. Please verify your considerations from question 3 in your real network.