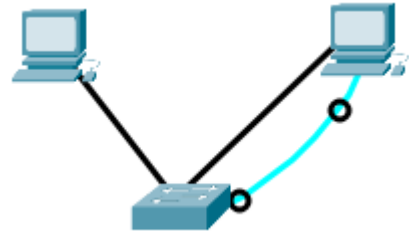


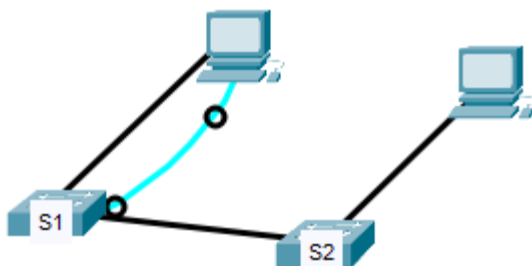
## Lab work: MAC addresses and switch MAC address table

1. Open the class computer (password = tllabra)
2. Open the network settings of your computer and make sure that only the TP-Link network card is used, other network cards can be turned off.
3. Assign IP addresses to computers (TP-Link network card) using 192.168.5.0 /24 networks. (Please note that each computer has a unique IP address)

4. Build the network shown in the adjacent picture by connecting computers to a switch ports f0/13 and f0/15. Use Switch S1, so from the other computer, also connect the console connection (PC CON) to the console port on the switch (S1-con).



5. Use Putty-software and open the console connection to your switch and give it a name S1.
  - In Putty, use serial connection and COM-3 port
6. Test the connection between the computers with ping. If the connections do not work, find out what is wrong (ask your instructor for help if necessary) and try again.
7. Find the MAC addresses of the computers and note them down (use ipconfig/all command in your PC)
8. Check out the MAC address table on the switch. (Switch#show mac-address-table OR show mac address-table)
  - What addresses appear on screen after that command
  - What MAC addresses can be found on ports f0/13 and f0/15?
  - Does the table content match the network you're building?
9. Change your network to match the picture below.



10. Connect the computers to ports f0/13 and connect the switches to each other from ports f0/17. Test your connection by pinging between computers.
11. Check the contents of the mac address table on switch S1. How the contents of the table have changed
12. Is it possible that there can be more than one address on the same port?
13. Return the switch's S1 mac address table as a text file to Moodle.