

Distributed Computer Systems – Laboratory 2

Network interfaces

1. Compile and run the program delivered by the lecturer and modify the MAC addresses presented on the console to the hexadecimal form, just as the `ipconfig /all` (MS Windows) command does..
2. Create the program that will show the details of the selected network interface (its name, MAC address and IP numbers attached to it). Use the `getByName()`, `getHardwareAddress()` and `getInetAddresses()` methods. The name of the queried interface should be provided as the program's parameter.
3. Create the program that will list names (`getName()`) of all the non-virtual network interfaces (including the loopback address – in this case add the “loopback” string) with their MTU (use the `getMTU()` method), IP addresses, subnet masks, and broadcast addresses attached to them (use the methods of the `InterfaceAddress` type: `getAddress()`, `getBroadcast()`, `getNetworkPrefixLength()`).

Source: [NetworkInterface \(Java Platform SE 8 \) \(oracle.com\)](https://docs.oracle.com/javase/8/docs/api/java/net/NetworkInterface.html)