

# Assignment 9 – Networking basics and socket programming

## Question 1: Networking basics (8 points)

Are the following statements true or false? **Circle or mark your answers below.**

[True/False] Data sent over Internet is wrapped in network packets.

[True/False] IPs (IPv4) are 32bit addresses.

[True/False] We need to specify the IP address when sending data in order to differentiate between different machines.

[True/False] We need to specify the ports when sending data in order to differentiate between different processes on the same machine.

[True/False] For TCP, the `recv()` call blocks by default (i.e., it will wait for data).

[True/False] DNS (Domain Name System) maps user-friendly names to IPs.

[True/False] Ping is used to find out the reachability of a network host.

[True/False] A network packet typically follows the TCP/IP layered architecture, and the ordering of the headers is: Ethernet/IP/TCP/HTTP/Data.

## Question 2: Socket programming II (2 points)

Read Ch7.3 “select() - Synchronous I/O Multiplexing, Old School”:

<https://beej.us/guide/bgnet/html/split/slightly-advanced-techniques.html>

**Please write down “yes” if you have finished reading the chapter; otherwise, write down “no”. (You will lose points when writing down “no”).**