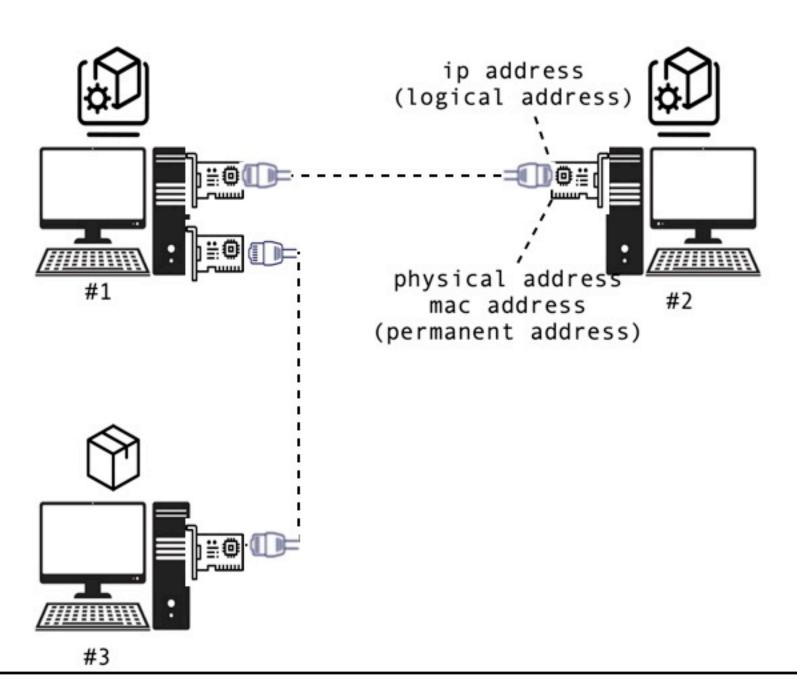
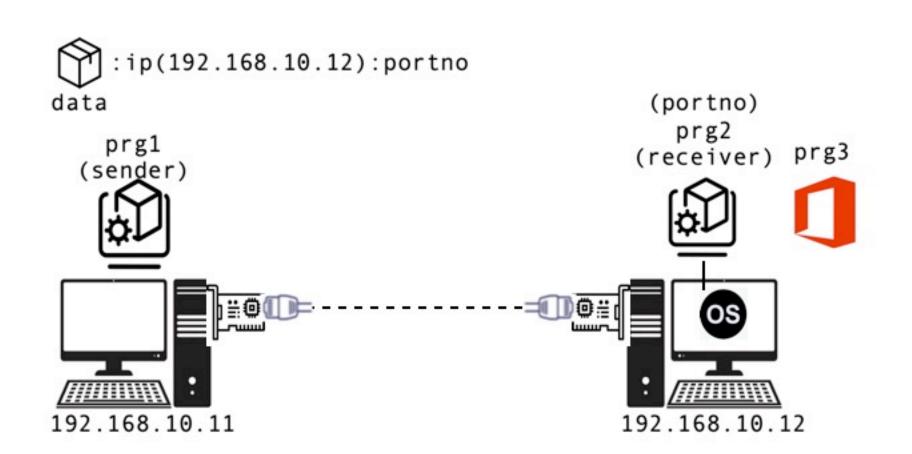
How does computers are connected with each other?



How does the programs exchange the data across the network?



The port number of a program can be anything between 0 - 65535

0 = reserved (IANA)

1 - 1023 = assigned to services (well-known ports)

1024 - 65535 = Ephemeral port

49152 - 65535 = Dynamic (private) range

If any program inorder to receive the data from the network, it should have an identity (unique number)

The program has to request the underlying operating system of the computer to generate a unique number and assign to the program. The unique number generated by the operating system to identify the program on that computer is called "port no".

So the sender program should along with ip address should specify portno of the program while sending the data. once the data is received by the receiver computer, the operating system of the computer takes the data and identifies the respective program to whom the data should be delivered to based on portno.

In-short:

Without a portno a program cannot expose itself over the network.