**ROLE OF IP IN NETWORK**

* Addressing hosts,
* Routing packets of data through IP network to destination host,
* Communicates routers with each other,
* IP is used in Ethernet switches which a use IP to control multicast routing.
* Indicating the origin of the message or request and where it should be sent,
* Identifying a subnetwork, a network, and a device within the network,

**Internet protocol and Ethernet.**

Ethernet is a way to connect clients to the server part of a network society. Ethernet is the wired or the way to connect a stabile and more durable network with cable or wire. Ethernet is a fast way to connect client to client or client to server side. It will be done by plug the Ethernet cable into the lan port. The benefits by a wired network is, it has a longer rage distance then for example Wifi have. Wifi only have about 10 meters of good signal strength where cable connection has around 100 meters. But from there, the signal will slow down. By doing a wired connection to a for example a router or a switch you can easily make some rules for a specific client and categorise the clients by groups with varies of features.