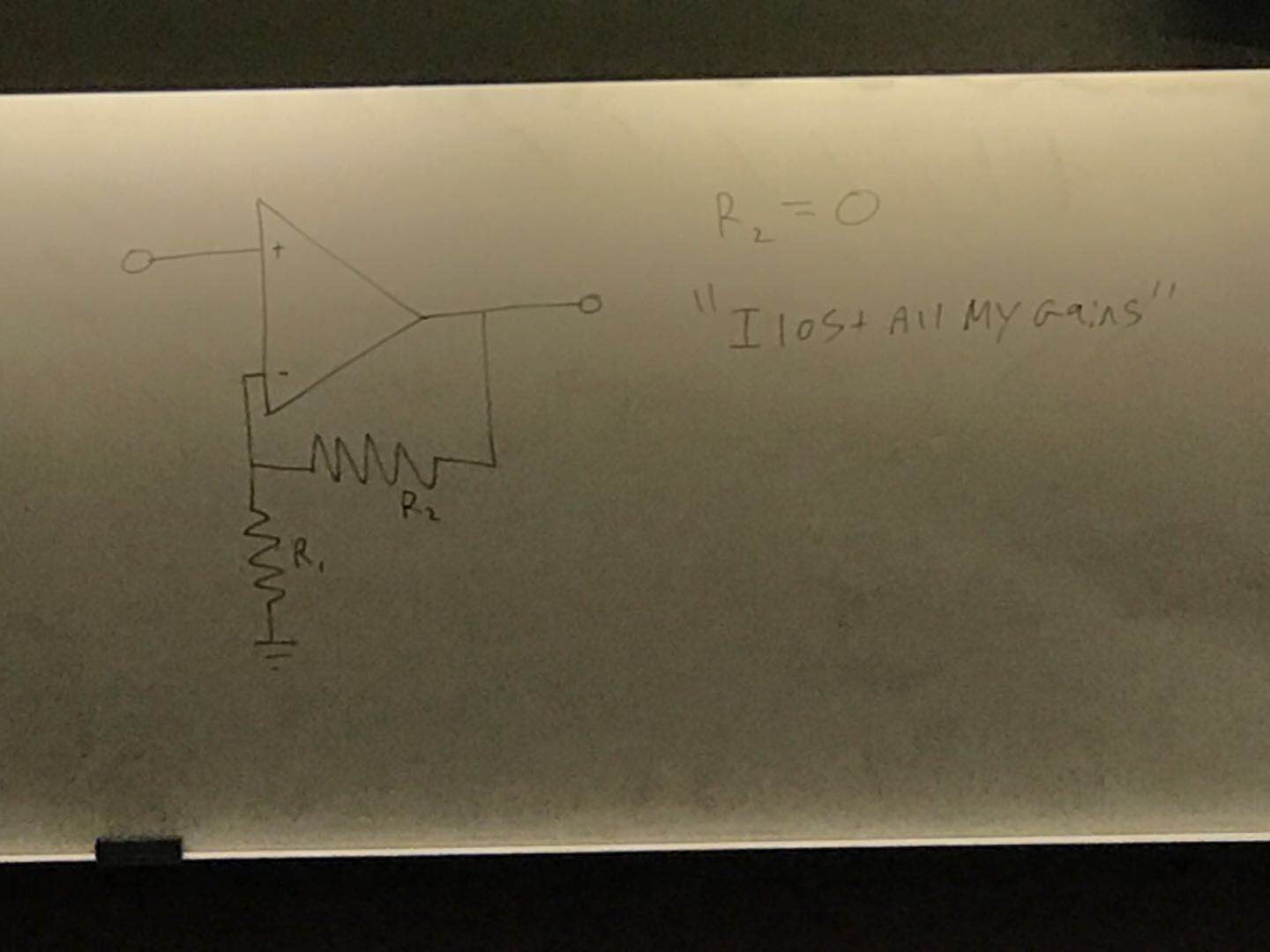
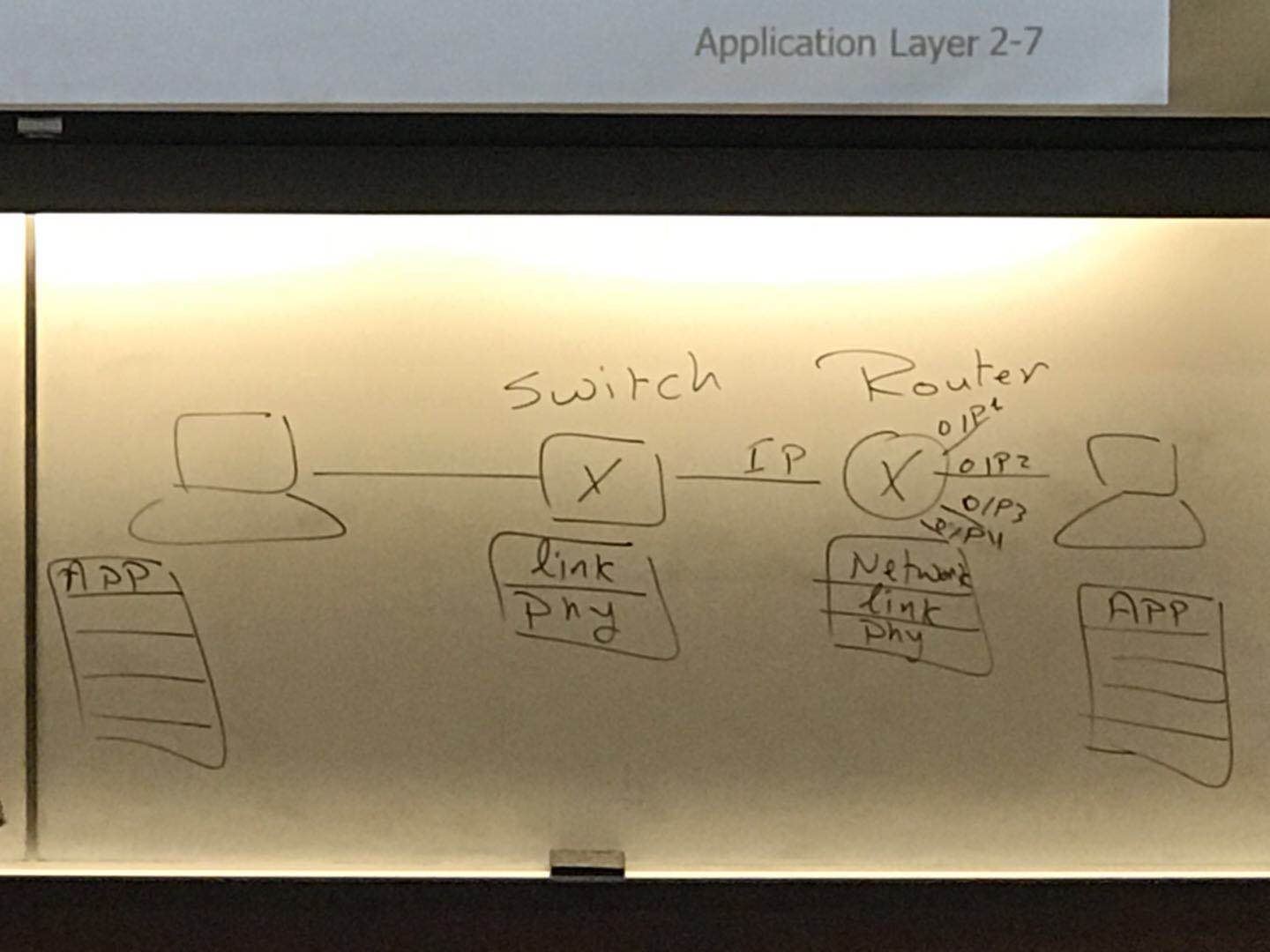
ECE 358 Chapter 2

2.1 Application Layer



The layer of router

P2P architecture

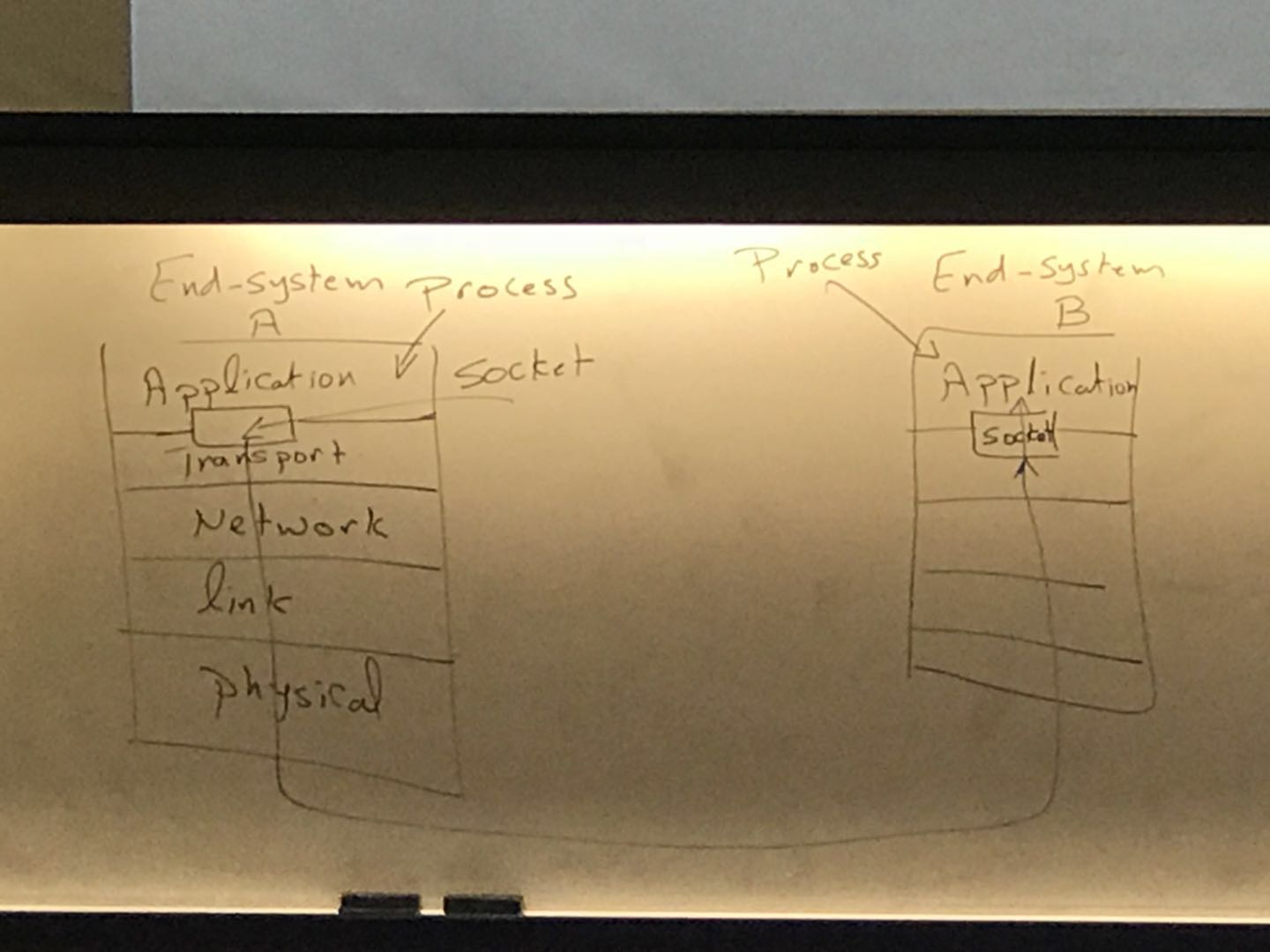
There is no server, computer connect directly.

Challenges for P2P APP:

1. Incentives to encourage users to participate with their resources.
2. Challenging management (centralized)
3. Asymmetric bandwidth
4. Security is difficult to control

A socket will be used to differentiate between different processes running on the same network application in the same end system.

A socket is a combination of the IP address of the end system and a port number assigned by the end system to a process.



SSL: Secure secret layer

2.2 Web and HTTP

-network application needs to be implemented on end systems but not on network cores (routers or switches.)

Network app architecture

1. Client server
2. P2P

HTTP – hyper text transfer protocol

It is used for web systems

Architecture of HTTP: Client-server

In pipelining, an end-system initiates requests for multiple objects without waiting to receive an object after the other.

RTT-Round Trip time

A web cache(or proxy) is a network entity that handles the http requests on behalf of the web server if they have the request resources if not, the forward the http request to the web server.