Your task here is to add the basic UDP layer. At this point, the UDP layer should be able to get input from the keyboard or from the IP layer (the IP layer no longer gets input from the keyboard, nor does it send output to the screen—other than for errors, maybe).

You'll need the full IP header. I'd suggest a global structure—we have prototypes—see the web page. UDP is IP protocol 17. Your UDP layer can/should use the `vn_gethostbyname` for the "dns" lookup. Later, the applications will use this, not UDP.

The network kernel must be a single process—and you must keep the UDP and IP functionality separate—just as in real life.

Even though you will not be implementing the TCP layer, your kernel should be such that a TCP layer could be implemented—so you must not automatically have your IP layer pass incoming packets up to UDP.

Note: should UDP be a separate thread from IP?