What are the different parts of your IP stack and what data structures do they use? How do these parts interact (API functions, channels, shared data, etc.)?

- Map for IP lookup table (global, shared)
- For routers: map for interfaces that correspond to a host/router where interfaces are structs with virtual IP address, network, and UDP connection

What fields in the IP packet are read to determine how to forward a packet?

- Checksum and TTL to determine validity of the packet
- Version to determine format of address (IPv4 or IPv6)
- Destination address to determine whether the packet is for this device
- Protocol to determine how to send the data to its destination

What will you do with a packet destined for local delivery (ie, destination IP == your node's IP)?

If the destination IP is this node's IP, then the packet should not be sent to another node at all; it can just be delivered to this node's interface

What structures will you use to store routing/forwarding information?

Structs with virtual IP address, network, and UDP connection

What happens when a link is disabled? (ie, how is forwarding affected)?

If the other end of the link is a host, the host program should terminate. If it's a router, the corresponding interface should be removed from the lookup map (mentioned in question 1) so that it will fail to look up the interface if data is still sent through the link and return an error message

For milestone: