Design Structure & Documentation

Data consideration

The structures implied have a nested structure, and are saved in structs.h.

Layer 3 `l3_t` holds the integers representing source and desitation address for layer 3, as well as the priority level of the packet.

Layer 2 `l2_t` holds characters representing the layer 2 source and destination address, and a `l3_t` element.

Element type `t_elem` holds a pointer to an instance of a `l2_t` variable, as well as a pointer to a same structure type. This is done to achieve a linked list.

Head list `hlist_t` holds a pointer to a `t_elem` instance. It also has a char ID where source (or destination) of a packet are saved. The final element is a pointer to a same structure type, to achieve another linked list. I preferred adopting this solution, rather than using an array to store the various pointer to the heads of the queues, because it provides a more efficient (dynamic) memory use. Also, wanting to collect dumped packets, this implementation allowed me to create the dumped packet list on in case of an actual need.