

The `split.c` file contains functions that are used to split and analyze network packets. Here are the main functions:

1. `ars_seems_ip`: This function checks if the given packet seems to be an IP packet. It checks the version, header length, and checksum of the packet.
2. `ars_guess_ipoff`: This function tries to guess the offset of the IP header in the packet. It iterates over the packet data until it finds a sequence that seems to be an IP header.
3. `ars_check_ip_cksum`: This function checks the checksum of an IP header. It creates a copy of the header, sets the checksum field to 0, calculates the checksum of the modified header, and compares it to the original checksum.
4. `ars_check_icmp_cksum`: This function checks the checksum of an ICMP header in a similar way to `ars_check_ip_cksum`.
5. `ars_split_packet`: This function splits a packet into its constituent parts (IP header, ICMP header, TCP header, etc.) and stores them in an `ars_packet` structure. It uses a finite state machine, with each state corresponding to a different part of the packet.
6. `ars_split_ip`, `ars_split_ipopt`, `ars_split_icmp`, `ars_split_udp`, `ars_split_tcp`, `ars_split_tcptopt`, `ars_split_igrp`, `ars_split_igrpentry`, `ars_split_data`: These functions handle the different states of the finite state machine in `ars_split_packet`. They each handle a different part of the packet (IP header, IP options, ICMP header, etc.), and set the next state based on the contents of the current part.