Algorithm Documentation

Our json file is in the format of

"object" : <name for protocol object>

"name": <name of protocol being dissected>

"description":<data label for protocol object>

"table": <corresponding table to be indexed>

"port": port number to be used.

First we found a open source parser called jsmn to parse the json file. We tinkered with it to have it store the 4 attributes into variables of the same name. Then we open a file to write the lua script to. After that is done we search the name attribute to determine the type of protocol that needs to be dissected. First it declares writes the line to declare the protocol object in lua using the "object" variable as the name for the protocol. Then from there it reads the "name" variable to determine which fields are necessary. It uses the description variable to form the fields. From there the code is split into the three sections. ICMP, RTP, and RIP. The corresponding fields are then added to the subtree of the protocol object. After that is all done the program checks the "table" and "port" fields to understand which ports and tables to run the dissector on.