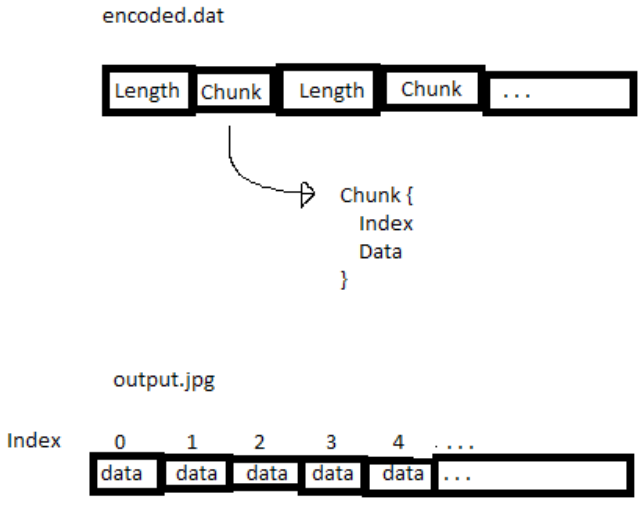
PARRY LABS

Parry Labs Code Challenge

Protocol buffers are a language and platform neutral way of serializing structured data. You define how you want your data to be structured once, then you can use special generated source code to easily write and read your structured data to and from a variety of data streams and using a variety of languages. Data is structured in the form of messages in a .proto file and translated to language specific source code using the appropriate protocol buffer compiler. Code generated by the protocol buffer compiler can be referenced via the language specific protocol buffer API.

In this exercise, you are provided with a binary file containing a JPEG image that has been encoded using protocol buffers. The length of each protobuf message is a UInt32 prefixed to the start of the message. Within each protobuf message is the index (Int32) and the image data (byte array). You will need to decode each protobuf message and extract the image data. The image data is not in sequence, so you'll need to reorder them according to the message index. See image below for encoded and decoded sequencing.

Feel free to complete this in the language of your choice, although we would prefer C/C++, python, or Golang, and take as much time as needed. Please send us the decoded JPEG as well as your script for decoding the image. If you have any questions, feel free to ask.



https://developers.google.com/protocol-buffers/