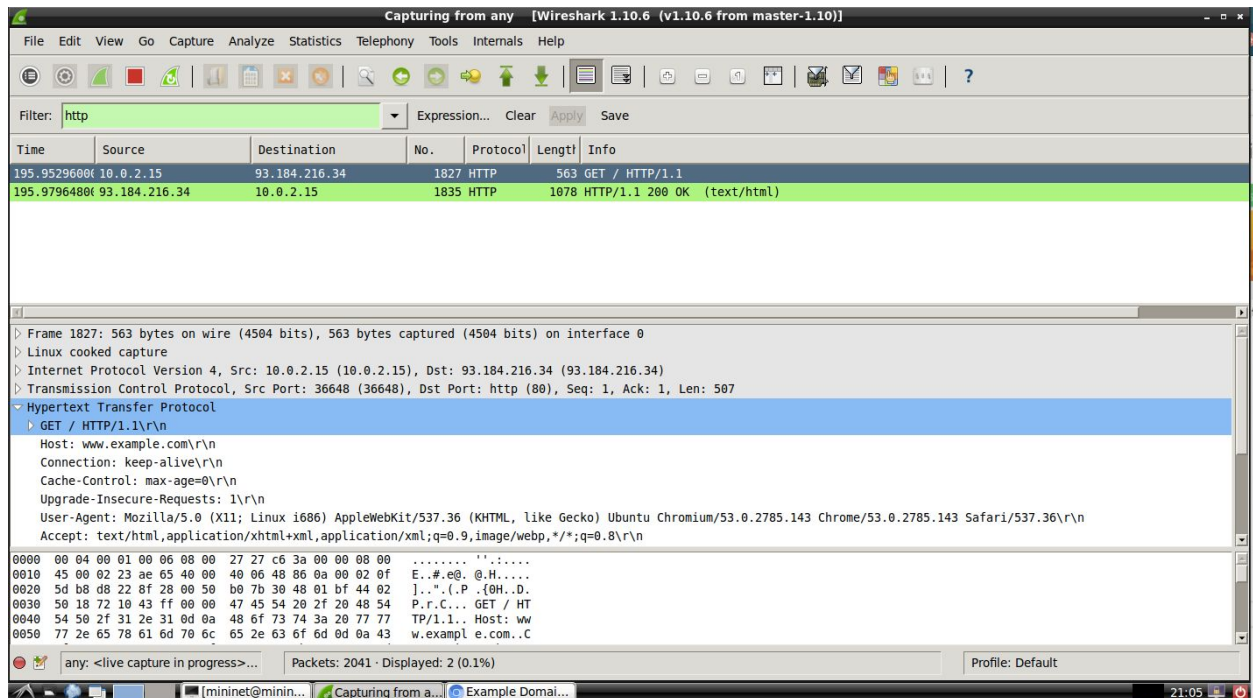Part 1: HTTP

1.

The method that my computer used was GET
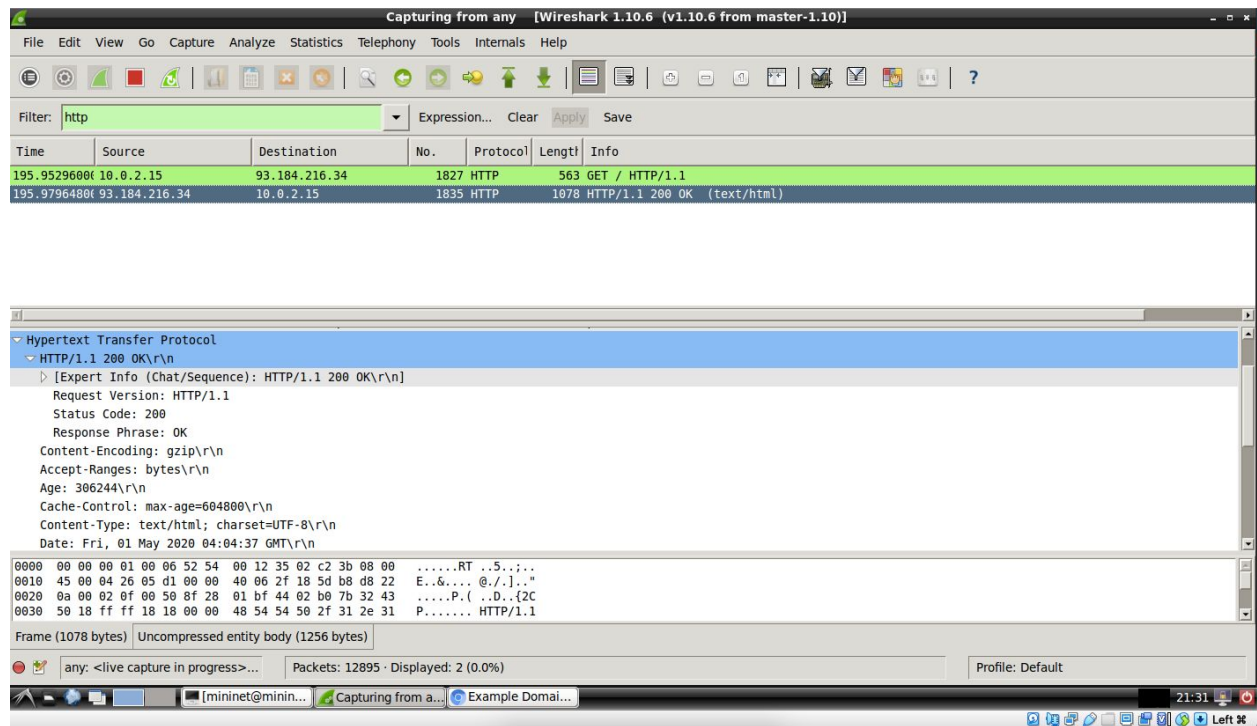
The URI used was www.example.com

Request URI: /

URI = uniform resource identifier

Can be a name, locator, or both for an online recourse, but a URL is just the locator.
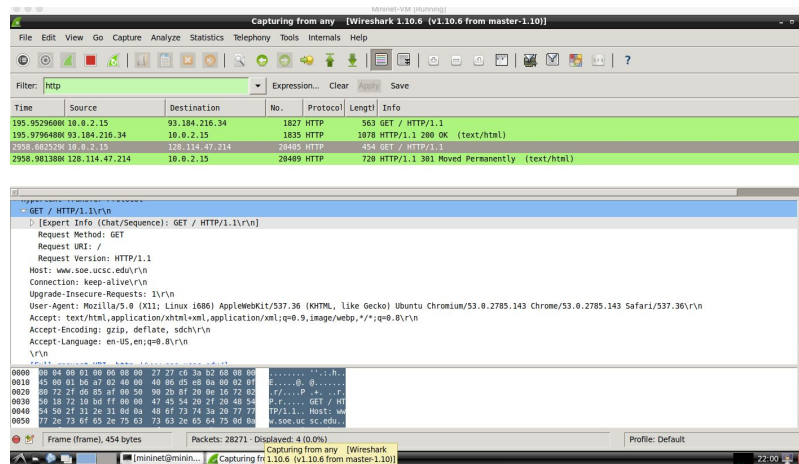
URL = uniform resource locator

2.

It returned status code: 200
The content type is: text/html; charset=UTF-8\r\n
The status code 200 means: standard response for successful HTTP requests
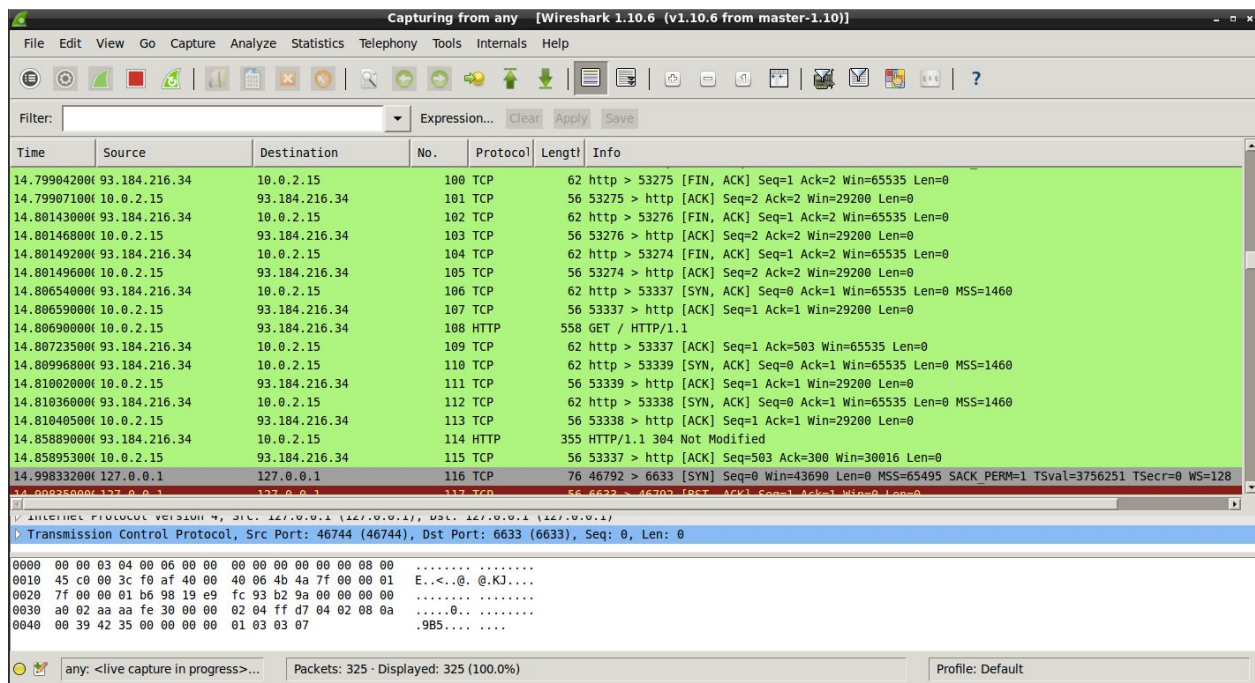
3.

Here are the screenshots for the initial http request and response. The difference is that the hypertext transfer protocol was moved permanently and its status code is 301
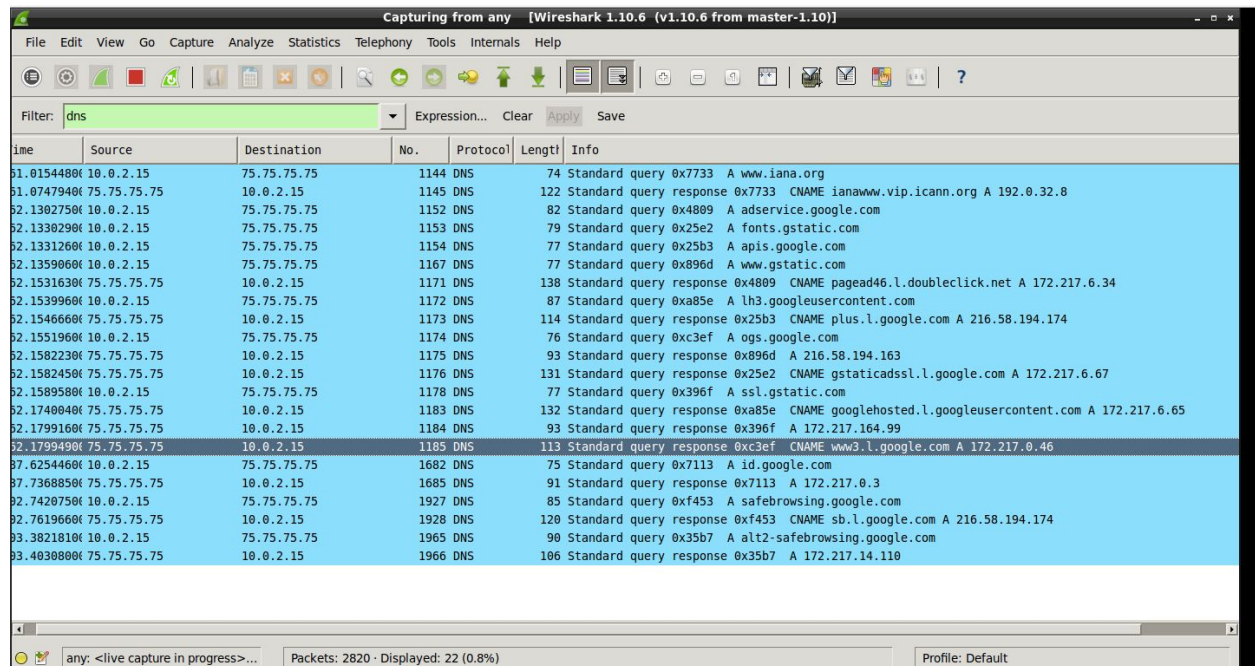
4. I figured out how to get postman to work and then I created an account. I then set the drop down bar to "POST" and then entered the URL: https://jsonplaceholder.typicode.com/posts into the URL slot. I then clicked on Body and then x-www-form-urlencoded and inserted a key with a value. I then sent the message and created a HTTP post message.
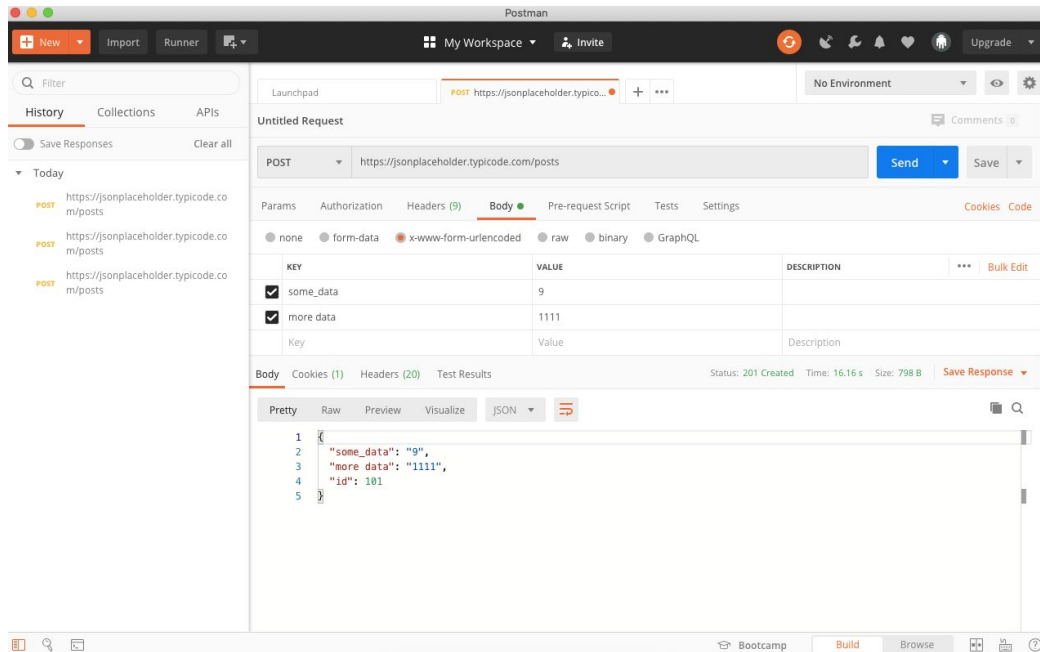
5. Several steps were taken the web page was loaded. The browser has to extract the domain name from the URL. The browser then queries DNS for the IP address. Then the first servers that the query interacts with are recursive resolvers. If the request was successful then the client machine now has an IP address. These are some of the steps taken before the page was loaded
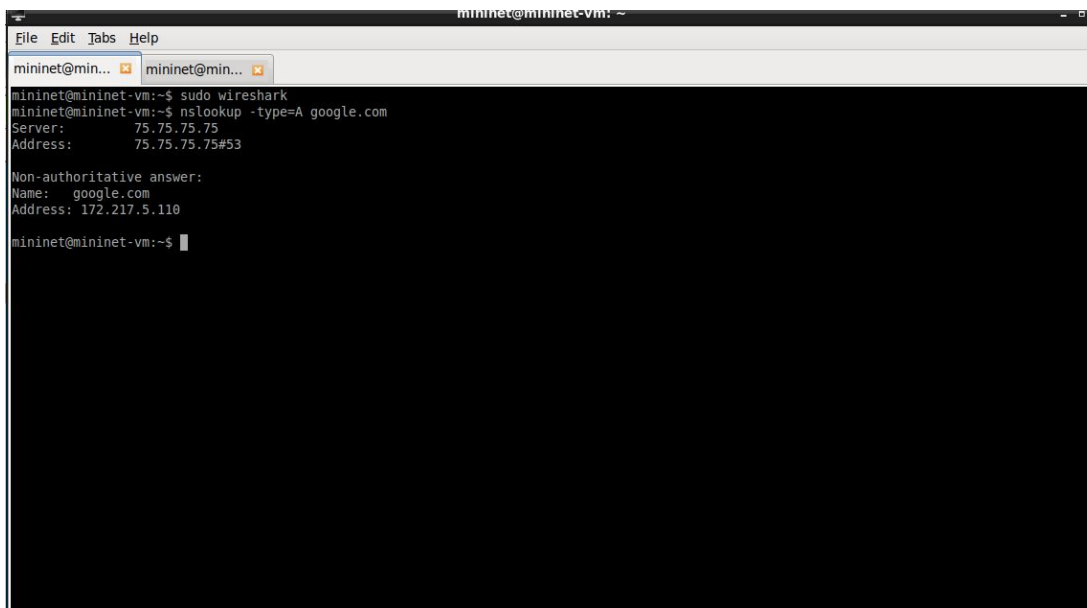
6. The computer already has the IP address so it will have a successful DNS request.

7.

IP Address: 172.217.5.110

8.yes it is being solved recursively with server 75.75.75.75

9.It is not getting resolved

10.typing nslookup -type=soa ucsc.edu produces the solution: adns1.ucsc.edu

11.

Win= 43690

12.The graph shows the download vs. time. The server sending over information to my computer

TCP Graph 2: any 80.249.99.148:80 -> 10.0.2.15:46912

Time/Sequence Graph (tcptrace)

Sequence number[B]

Time[s]
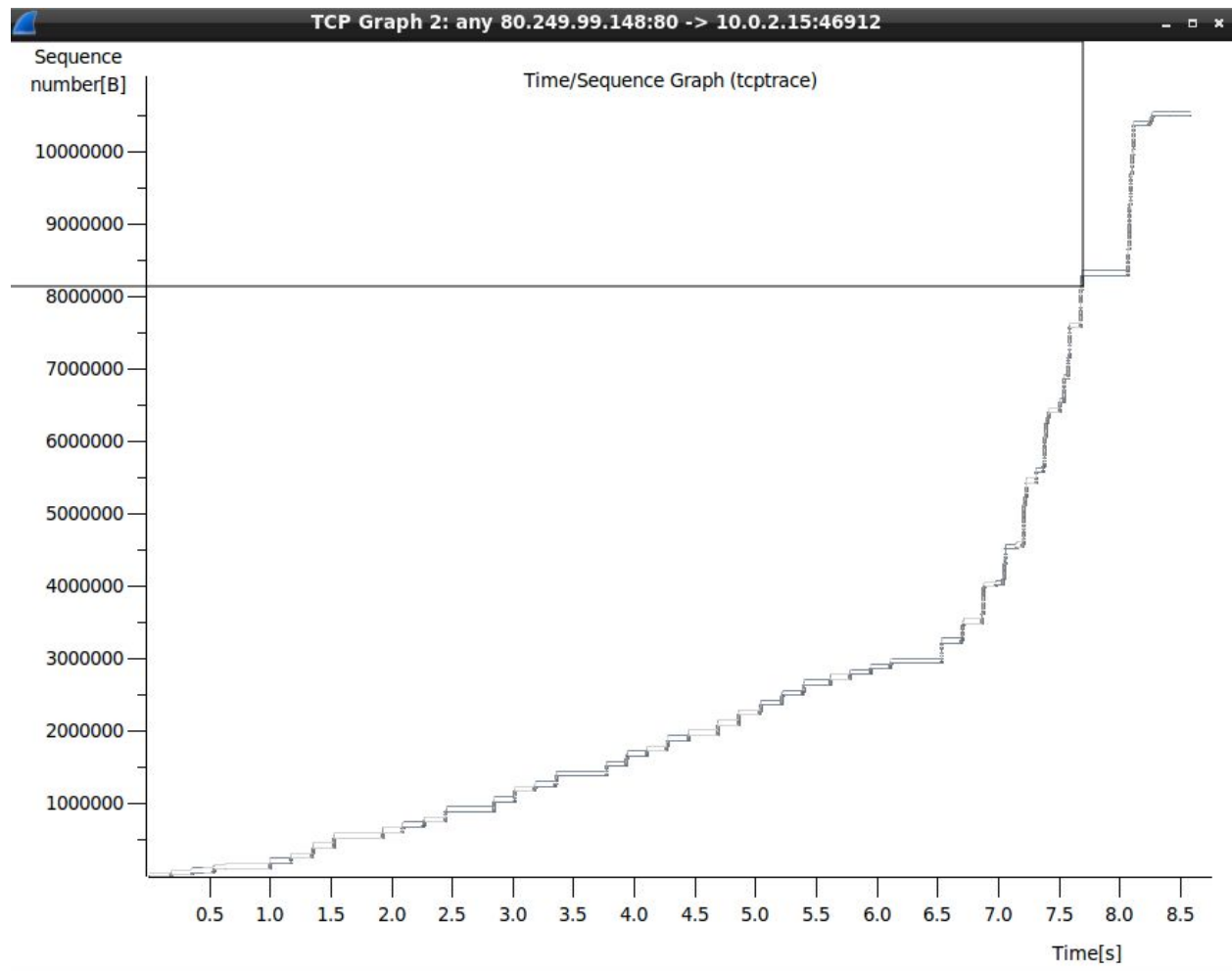
13.When the packet loss was at 100% there was no download at all, but as soon as there was 0% packet loss there was a complete download.
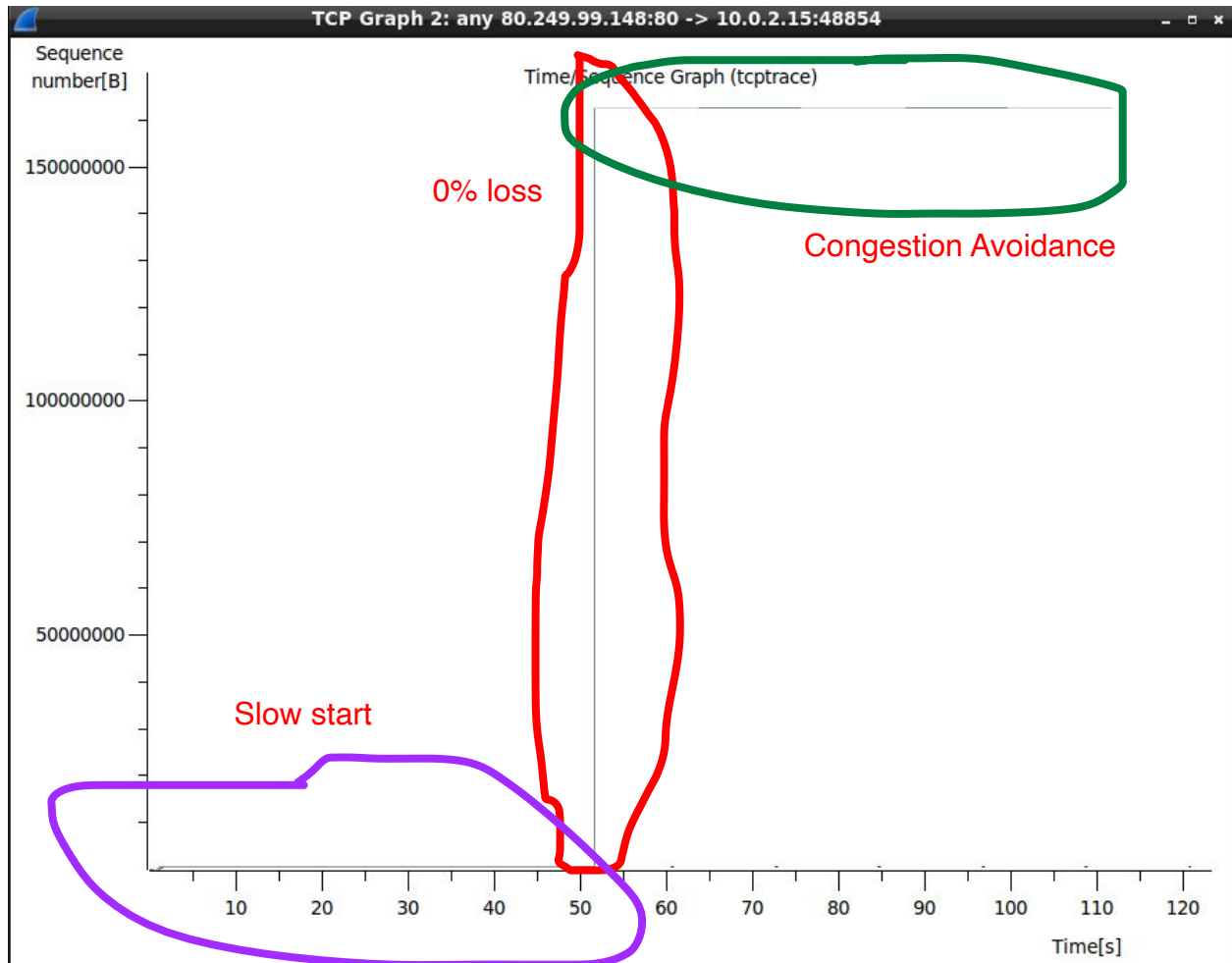
Special thanks to for the info:
https://dev.to/flippedcoding/what-is-the-difference-between-a-uri-and-a-url-4455

https://en.wikipedia.org/wiki/List_of_HTTP_status_codes