CS3331 LAB 3

Exercise 3

- 1. 150.203.161.98
 - Type A DNS query is sent
- 2. rproxy.cecs.anu.edu.au
 - It's easier to identify the alias than the canonical name
- 3. There are 3 authoritative name servers as shown in the authoritative section, with their ipv4 addresses shown in the answer section.
- 4. 129.94.242.2
- ns2.cecs.anu.edu.au | 150.203.161.36
 ns3.cecs.anu.edu.au | 150.203.161.50
 ns4.cecs.anu.edu.au | 150.203.161.38
- 6. webserver.seecs.nust.edu.pk
 - Type A DNS query
- 7. No authoritative answer has been given as there is no aa flag in the response.
- 8. The query was refused to be run through the cecs.anu.edu.au nameservers. Recursion is attempted but unavailable for use. This means the name server from CECS ANU refused our query to access yahoo.com through them.
- 9. A DNS query is sent through one of 'yahoo.com's name servers with the query type MX.
- 10. We had to iteratively query 5 levels of domain to get the authoritative name server to send the final A type query to find the host IP address of lyre00: 129.94.210.20.

 There were a total of 67 queries sent to find the IP address from top level to bottom.
- 11. Yes, a machine can have both multiple IP addresses and names attached to it. It can have various alias' as well as IP addresses for the networks it's connected to.

Exercise 4

In WebServer.py