

**Course:** CIS 68C2-01**Homework:** #3**Due:** 6pm Wednesday, June 12<sup>th</sup>

## Instructions

Your goal is to learn to use the one or more of the available name service tools to explore the DNS records of various sites. The tools will allow you to see Resource Records such as the SOA, A, PTR, and CNAME types. You can use any system that has such tools (**nslookup**, **dig**, **host**). The **nslookup** program is an old standard, and **dig** is becoming more popular, but not available on the Foothill Solaris machines. If you are using Linux, you can use either.

1. For the domain: **ketki.com**
  - a. What types of resource records are available?
  - b. Who is the email contact for the domain?
  - c. What are the authoritative name servers for the domain?
  - d. The name servers for the domain are not optimal – what is wrong?
  - e. Through which host(s) does mail get forwarded?
2. Lookup the SOA records for **joao.com** and **fumar.com** – what do they have in common?
3. For the domain **sridhara.org**:
  - a. What name server(s) provide authoritative answers for the domain?
4. For the domain **anita.org** :
  - a. How long do cached records survive?
  - b. When was the zone file last changed?
5. Write an SOA record for **usda.gov** (as it would look in the zone file, using the proper syntax).
6. For the host **www.apple.com**
  - a. What domain does the host live under?
  - b. Who is hosting this web server?
7. For the host: **prep.ai.mit.edu**
  - a. What type of CPU does the system appear to have, and which OS is running on it?
  - b. What is the theme of the name servers on the 128.x.x.x network?
8. What value is in the TXT record for **ftp.ncsa.uiuc.edu**?
9. What does **www.egroups.com** refer to and what is its IP address?
10. For the class A network **19.x.x.x/8**:
  - a. Give the single nslookup command line that will tell you the owner.
  - b. Who owns this network?