CS3103 Programming Assignment 2

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- How to compile:

- Go to the src folder:

- javac PacketParser.java

- javac DNSParser.java

- How to run:

- java PacketParser hex.dat > PacketParser.out

- java DNSParser hex.dat > DNSParser.out

- Extra Features:

- In question 1, able to analyze ping request and ping reply packets, and print their number.

- In question 2, able to analyze and print out responses of other queries including 'A' queries.

- In question 2, able to analyze and print out details of RRs of other types, including:

- A Records

- NS Records

- CNAME Records

- SOA Records

- PTR Records

- Sample Output Files:

- Q1: PacketParser.out

- Q2: DNSParser.out

- Counting logic in question A:

- Ethernet Frame offset: 14 bytes.

- Depending on the EtherType, the packets can be categorized as follows:

- ARP

- IP4

- ICMP

- TCP

- DNS

- UDP

- DNS

- Didn't count IPv6

(Please turn over)

- Counting logic in question B:

- Assume each packet only has one question, multiple RRs.

- Didn't count DNS in TCP

- The MDNS packets are ignored.

- Development Platform:

- Max OS X 10.9

- java version "1.7.0\_40"

- Java(TM) SE Runtime Environment (build 1.7.0\_40-b43)

- Java HotSpot(TM) 64-Bit Server VM (build 24.0-b56, mixed mode)