README For Packet Analyzer

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Steps to Compile And Run application

1. **Unzip** pktanalyzer.zip to local machine.

2. Compile: javac *.java

This will make ".class" files of every ".java" file in the folder.

E.g. pktanalyzer.class, icmp.class, ip.class, etc.

NOTE:

Here the file **packetanalyzer.java** is the file containing "main" method.

3. Execute the code:

java pktanalyzer /absolute_path_to_bin_files/

E.g. java <u>pktanalyzer</u> /User/<u>bhaarat</u>/Documents/Project1/tcp.bin

NOTE:

If the path to file contains folder with name having space in between then an escape character '\' must be used to successfully run the program.

E.g. /Users/<u>bhaarat</u>/Documents/Project\ 1/tcp.bin

4. Screenshot to Compile and Run program

```
Bhaarats-MacBook-Pro:src bhaarat$ javac
                                                                                 Step 2 Compile
Bhaarats-MacBook-Pro:src bhaarat$ ls -l
 -rw-r--r-- 1 bhaarat staff 1224 Sep 8 09:55
                                                                                             .txt
-rw-r--r-- 1 bhaarat staff 1789 Sep 8 10:06 eth net.class
-rw-r--r-- 1 bhaarat staff 1762 Sep 8 09:57 ethernet.java
-rw-r--r-- 1 bhaarat staff 2180 Sep 8 10:06 icmp.class
 -rw-r--r-- 1 bhaarat staff 2247 Sep 8 09:57 icmp.java
-rw-r--r-- 1 bhaarat staff 5554 Sep 8 10:06 ip.class
-rw-r--r-- 1 bhaarat staff 9904 Sep 8 09:57 ip.java
                                                                    8 10:06 ip.class
8 09:57 ip.java
-rw-r--r- 1 bhaarat staff 9904 Sep 8 09:5/ ip.java

-rw-r--r- 1 bhaarat staff 2153 Sep 8 10:06 pktanalyze

-rw-r--r- 1 bhaarat staff 2061 Sep 8 10:04 pktanalyze

-rw-r--r- 1 bhaarat staff 4326 Sep 8 10:06 tcp.class

-rw-r--r- 1 bhaarat staff 7585 Sep 8 09:57 tcp.java

-rw-r--r- 1 bhaarat staff 2101 Sep 8 10:06 udp.class

-rw-r--r- 1 bhaarat staff 2956 Sep 8 09:57 udp.java
                                                                   8 10:06 pktanalyzer.class
                                                                   8 10:04 pktanalyzer.java
8 10:06 tcp.class
[Bhaarats-MacBook-Pro:src bhaarat$ java pktanalyzer /Úsers/bhaarat/Documents/Fall∖ 2017/FCN_651/Pr]
oject1/tcp.bin
                                                                                  Step 3 Rur
ETHER: ---- Ether Header -----
ETHER:
            Packet Size = 266 bytes
Destination = 00:00:0c:07:ac:01,
Source = c0:14:3d:d5:72:8b,
ETHER:
ETHER:
ETHER:
                               = 0800 (IP)
ETHER: Ethertype
ETHER:
IP:
          ---- IP Header -----
IP:
IP:
          Header length = 20
IP:
          DSCP (6 bits) = 0x0
          000000.. = Best effort
IP:
          ECN (2 bits) = 0 \times 00
          .....00 = Non ECT
IP:
IP:
          Total length = 252 bytes
          Identification = 0x7eec (32492)
```