

## Data collection

Using **tcpdump** library (<a href="https://www.tcpdump.org/">https://www.tcpdump.org/</a>) create a program that executes the command to run tcpdump on you localmachine

The program should execute a simple command such as:

```
tcpdump -i all
```

which provides output in the following format:

```
12:07:02.131014 IP 172.16.83.6.56839 > server-99-86-249-213.lhr3.r.cloudfront.net.https: Flags [.], ack 4345, win 2043, options [nop,nop,TS val 602566275 ecr 2737358200], length 0
```

Using information in the tcpdump output, timestamp, source and destination addresses are collected and stored.

Both source and destination addresses should be cross referenced for the geographical location using <a href="https://about.ip2c.org/#inputs">https://about.ip2c.org/#inputs</a> or any other preferred GeoIP reference library available.

Timestamp should be converted into human readable format.

## Execution

- During run prompt user to input the number of seconds, packets should be captured.
- Display tcpdump output in console.

## Result Display

Display results in console in the following format:

Time	Source IP	Destination IP	Geolocation
24 April 2020, 19:15	172.22.22.1	8.8.8.8	USA
24 April 2020, 19:15	172.22.22.1	1.1.1.1	UK
24 April 2020, 19:15	172.22.22.1	8.8.8.8	Canada