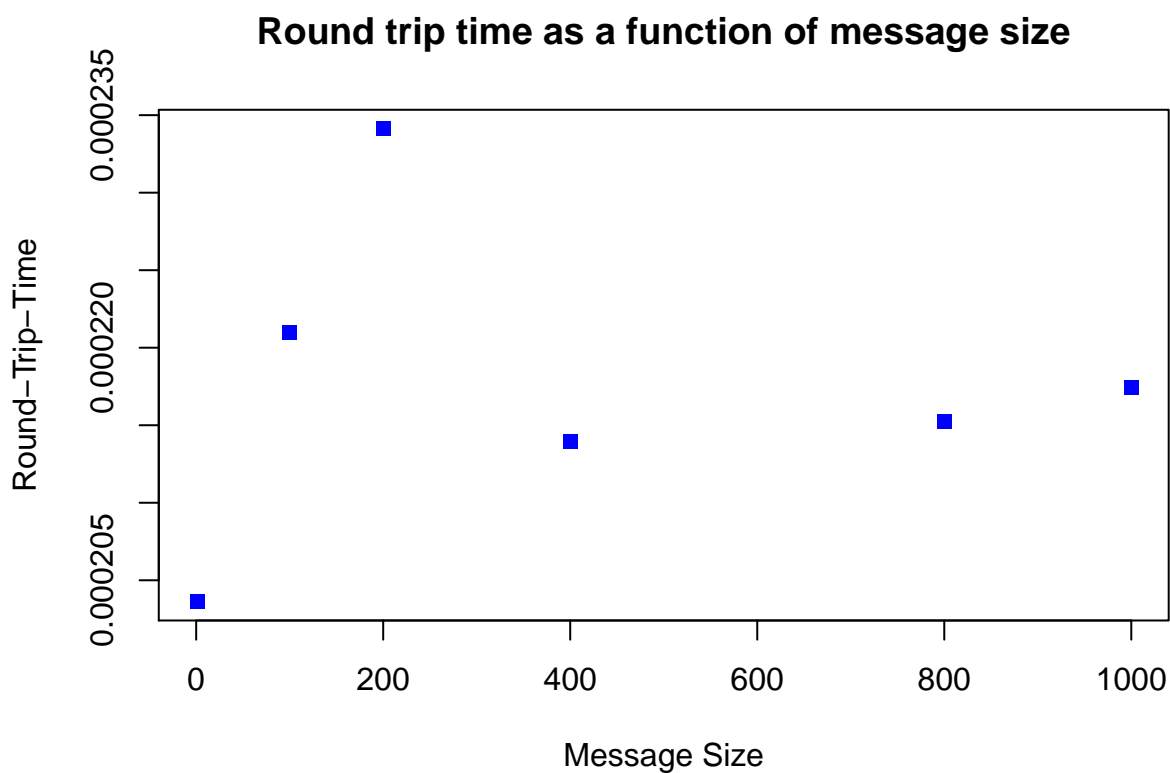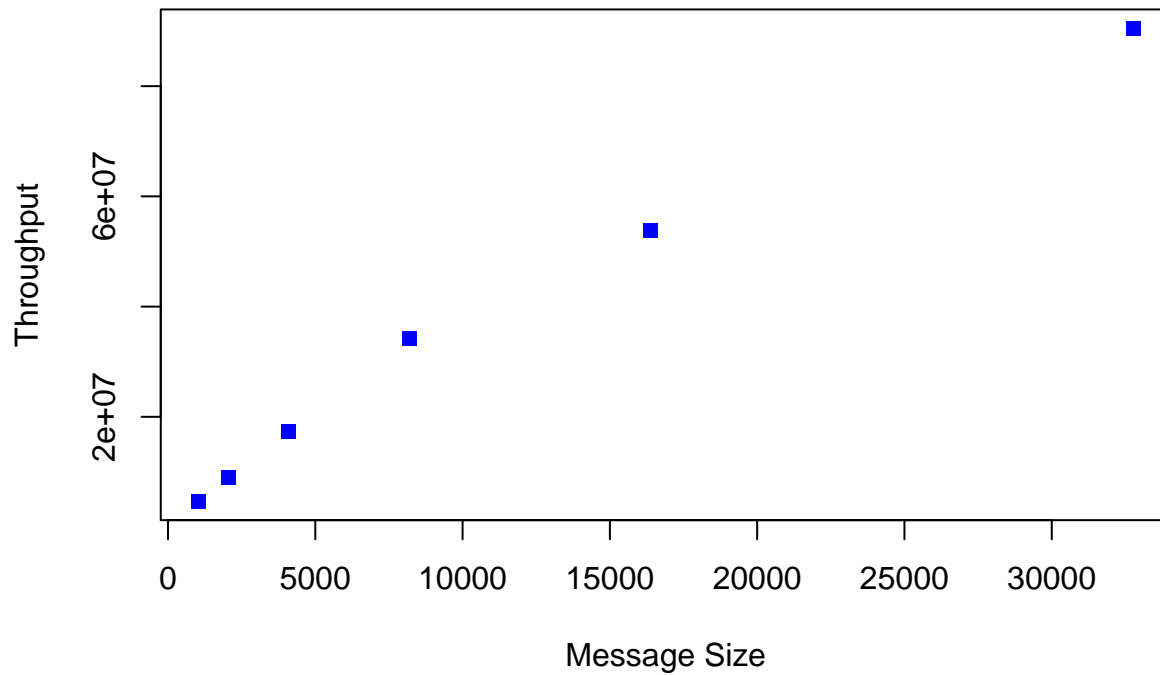# TCP Plots

Kyle Coleman

2/19/2018

```r
message_sizes_rtt <- c(1, 100, 200, 400, 800, 1000)
message_sizes_tput <- c(1024, 2048, 4096, 8192, 16384,
    32768)
rtt <- c(0.000203626496451242, 0.00022095044539388,
    0.000234127044677734, 0.000213956832885742, 0.000215244293212891,
    0.000217420714242118)
tput <- c(4683715.69901854, 8979651.46560736, 17426158.8964025,
    34293600.7094888, 53840319.7886843, 90488400.5176825)

plot(message_sizes_rtt, rtt, xlab = "Message Size",
    ylab = "Round-Trip-Time", main = "Round trip time as a function of message size",
    ylim = c(min(rtt), max(rtt)), xlim = c(0, 1000),
    pch = 15, col = "blue")
```



```r
plot(message_sizes_tput, tput, xlab = "Message Size",
    ylab = "Throughput", main = "Throughput as a function of message size",
    ylim = c(min(tput), max(tput)), xlim = c(min(message_sizes_tput),
        max(message_sizes_tput)), pch = 15, col = "blue")
```
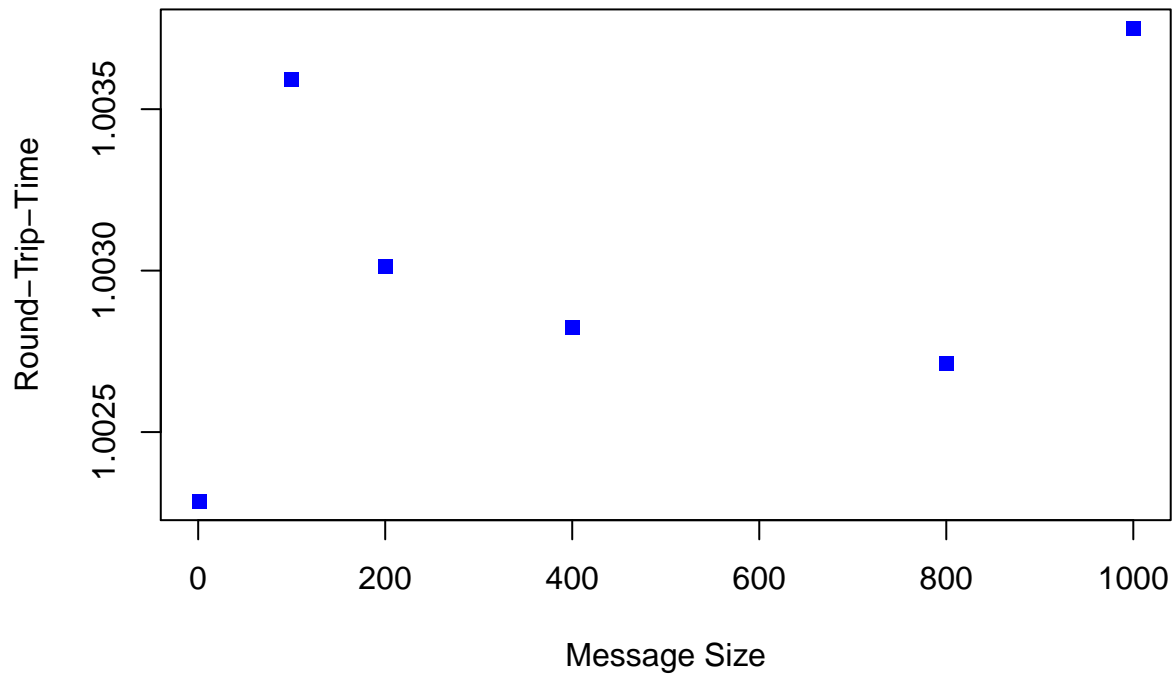
Throughput as a function of message size


```
message_sizes_rtt <- c(1, 100, 200, 400, 800, 1000)
message_sizes_tput <- c(1024, 2048, 4096, 8192, 16384,
    32768)
rtt <- c(1.00228578703744, 1.00359091758728, 1.00301419893901,
    1.00282437006632, 1.00271302858988, 1.00375029246012)
tput <- c(1020.68281847804, 2042.97958974121, 4081.47499832828,
    8159.22501399973, 16325.8769803493, 32658.0120915405)

plot(message_sizes_rtt, rtt, xlab = "Message Size",
    ylab = "Round-Trip-Time", main = "Round trip time as a function of message size with 1 second delay
    ylim = c(min(rtt), max(rtt)), xlim = c(0, max(1000)),
    pch = 15, col = "blue")
```

Round trip time as a function of message size with 1 second delay


```
plot(message_sizes_tput, tput, xlab = "Message Size",
    ylab = "Throughput", main = "Throughput as a function of message size with 1 second delay",
    ylim = c(min(tput), max(tput)), xlim = c(min(message_sizes_tput),
        max(message_sizes_tput)), pch = 15, col = "blue")
```

Throughput as a function of message size with 1 second delay