

# CS244 PA2 Writeup

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## Warmup exercise A

## Warmup exercise B

## Warmup exercise C

This delay-triggered scheme doesn't work very well. Below are our various results from runs.

Linear increase, exponential decrease, thresh = 75:  $\frac{1.55}{0.205} = 7.56$

Linear increase, linear decrease, thresh = 75:  $\frac{2.46}{0.479} = 5.14$

Exponential increase, exponential decrease, thresh = 75:  $\frac{2.46}{0.220} = 11.18$

Exponential increase, exponential decrease, thresh = 100:  $\frac{2.90}{0.289} = 10.03$

Exponential increase, exponential decrease, thresh = 85:  $\frac{2.58}{0.229} = 11.26$

Exponential increase and decrease with a threshold of 85ms worked the best. We believe this is because it allows the window to more rapidly adjust to changing network conditions compared to linear adjustments. Also, a threshold too low doesn't optimize for throughput, while a threshold too high adjusts too late.

## Warmup exercise D