

## Lab 2 Writeup

Team 6

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1. Concurrency means multiple tasks executing at the same time. Parallelism means one task being broken into multiple parts and executed in parallel.
2. No. Concurrency cannot happen with only one thread. One thread can only have one execution point.
3. a) For collecting each point:  $t = 100\mu s + 10ns = 1.0001 \times 10^{-4}s$   
Number of points can be collected in one second:  $n = 1/t = 9999 > 1000$   
No loss  
b) Loss rate:  $r = (100000 - 9999)/100000 = 90\%$   
c) Loss rate:  $r = (100000 - 9999 - 1000)/100000 = 89\%$   
d) Since the syscall round trip is the major component of delay, he should not use syscall. Using virtual file system to export the data is more efficient.