

Experiment 1

my mac os system block size 4096 bytes

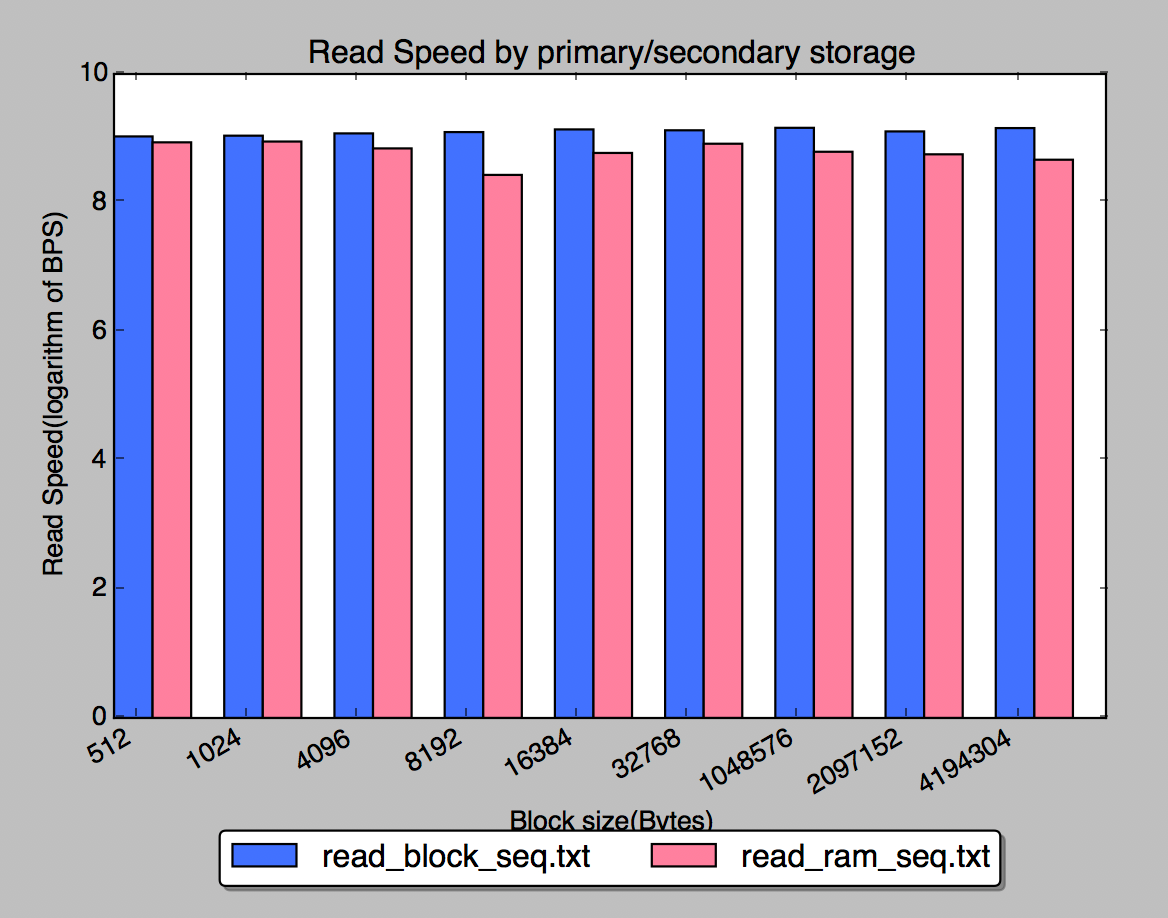
optimal block size to my experiment is 1MB

Does it correspond to the system disk block size? No

Is there a block size when further increase does not contribute to better performance? 1MB

The speed for writing in lines is 61406388.000 MBPS. It is slower then writing in Blocks.

Experiment 2



Q: What is the ratio of sequential read rate for secondary storage and for RAM? Does it correspond to the ratio discussed in class? If not, what do you think is the reason?

A: The ratio discussed in class is around 10^8.8/Sec (sequential RAM) and around 10^7.7/Sec (sequential SSD). But the ratio we got from the data is different, around 10^9/Sec(sequential SSD) and 10^8.7/Sec (sequential RAM). Read speed from RAM is always slower than SSD. The reason we thought is that our laptop RAM is also occupied with other applications when we run the code.