

Chapter 18

1. Page table size grows as address space grows, decrease as the page size grows.
Big page size contains more data entries per page, making page table size smaller given the same virtual address space size. But too big of page size harms flexibility, because a page is the minimum unit to move in memory hierarchy.
2. More entries in page table become valid.
3. 3rd is unrealistic, it has too large page size (1MB)
4. Address space must be a multiple of page size.

If the address space is bigger than physical memory, the program doesn't support swapping and will quit.

Chapter 19

1. The precision of `clock_gettime()` is 1 nanosecond (Linux) .
2. Please see `tlb.c` in this folder.
4. Please see `graph.py` in this folder.
5. Run `gcc tlb.c -Wall -O0` → optimization level 0
6. Use `sched_setaffinity()`
Each CPU has its own TLB, if the process is executed among different CPUs, every time it switches to a different CPU, it needs to fill the TLB from scratch. This will affect the accuracy of the measuring results.