

Read Tanenbaum, Bos: Chapter 3-3.6

## Exercises

1. How large is the address space on a 32-bit computer?
2. An 8086 chip has 20 address pins. How much physical memory can it support? MS-DOS reserved addresses above `0xA0000` for video memory and ROM. How much RAM could the system support?
3. On an 8086 system, suppose the `ds` register contains `0x2A00`.  
The instruction `mov ds:[0x18F4],ax` stores the value of the `ax` register into memory.  
At what physical address will it store `ax`?
4. For the built-in `malloc` on turing, small requests are returned from the heap, and large requests get their own memory area. How large does a request need to be to get its own memory area? (You can use the `malloc_test` demo program to figure this out).