第8章作业

8.3 Given five memory partitions of 100 KB, 500 KB, 200 KB, 300 KB, and 600 KB (in order), how would each of the first-fit, best-fit, and worst-fit algorithms place processes of 212 KB, 417 KB, 112 KB, and 426 KB (in order)? Which algorithm makes the most efficient use of memory?

8.9 Consider a paging system with the page table stored in memory.

a. If a memory reference takes 200 nanoseconds, how long does a paged memory reference take?

b. If we add associative registers, and 75 percent of all page-table references are found in the associative registers, what is the effective memory reference time? (Assume that finding a page-table entry in the associative registers takes zero time, if the entry is there.)

第8章作业

- On a *simple* paging system with a page table containing 1024 entries of 13 bits (including one valid/invalid bit) each, and a page size of 4096 bytes
  - (a) what is the size of the logical address space?
  - (b) how many bits are there in a logical address?
  - (c) how many bits in the physical address specify the frame number?
  - (d) how many bits in the physical address specify the offset within the frame?
  - (e) what is the size of the physical address space ?
  - (f) how many bits are there in a physical address?

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