执行测验: 第8章 内存管理 作业

测试信息

描述

说明

多次尝试 此测试允许进行多次尝试。

强制完成 本测试可保存并可稍后继续。

问题完成状态：

问题 1

12 分 已保存

Assuming a 1-KB page size, what are the page numbers and offsets for the following address references (provided as decimal numbers):

a. 3085 **page numbers：** 3 **, offsets：** 13

b. 42095 **page numbers：** 41 **, offsets：** 111

c. 215201 **page numbers：** 210 **, offsets：** 161

问题 2

10 分 已保存

单击"保存并提交"以保存并提交。单击"保存所有答案"以保存所有答案。

a. A conventional, single-level page table 答案(填10进制数): 1024

b. An inverted page table 答案(填10进制数): 32

问题 3

10 分 已保存

Consider a logical address space of 256 pages with a 4-KB page size, mapped onto a physical memory of 64 frames.

a. How many bits are required in the logical address? 答案（填十进制数）: 20 bits

b. How many bits are required in the physical address?答案（填十进制数）: 18 bits

问题 4

36 分 已保存

Given six memory partitions of 100 MB, 170 MB, 40 MB, 205 MB, 300 MB, and 185 MB (in order), how would the **first-fit, best-fit, and worst-fit** algorithms place processes of size 200 MB, 15 MB, 185 MB, 75 MB, 175 MB, and 80 MB (in order)?

First-fit:

1. 200M process put in 205MB partition
2. 15M process put in 100MB partition
3. 185M process put in 300MB partition
4. 75M process put in 100MB partition
5. 175M process put in 185MB partition
6. 80M process put in 170MB partition

Best-fit

1. 200M process put in 205MB partition
2. 15M process put in 40MB partition
3. 185M process put in 185MB partition
4. 75M process put in 100MB partition
5. 175M process put in 300MB partition
6. 80M process put in 300MB partition

Worst-fit

1. 200M process put in 300MB partition
2. 15M process put in 205MB partition
3. 185M process put in 205MB partition
4. 75M process put in 185MB partition
5. 175M process put in must wait
6. 80M process put in 170MB partition

问题 5

10 分 已保存

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

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a. If a memory reference takes 50 nanoseconds, how long does a paged memory reference take? 答案（填写数值）: 100 ns

b. If we add TLBs, and if 75 percent of all page-table references are found in the TLBs, what is the effective memory reference time? (Assume that finding a page–table entry in the TLBs takes 2 nanoseconds, if the entry is present.) 答案（填写数值）: 64.5 ns

问题 6

10 分 已保存

Considering the segment table, what are the physical addresses for the following logical addresses?

Segment	Base	Length
0	219	600
1	2300	14
2	90	100
3	1327	580
4	1952	96

What are the physical addresses for the following logical addresses?

a. 0,430 答案: 649

b. 1,10 答案: 2310

c. 2,500 答案: invalid

d. 3,400 答案: 1727

e. 4,112 答案: invalid

注：如果地址越界，填空值为： **invalid** ，否则填空值为十进制数地址。