工作空间   **课程**   👤 工科试验班（信息）裴弈心   **1** ▾

🏠 | 作业 | **复查测验提交: 第8章 内存管理 作业**

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用户	工科试验班（信息）裴弈心
课程	操作系统
测试	第8章 内存管理 作业
已开始	19-11-25 下午10:55
已提交	19-11-25 下午11:02
截止日期	19-12-1 下午11:30
状态	已完成
尝试分数	得 83 分，满分 88 分
已用时间	6 分钟
显示的结果	所有答案, 已提交的答案, 正确答案

问题 1   得 12 分，满分 12 分

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：[a1]　, offsets：[a2]

b. 42095   page numbers：[a3]　, offsets：[a4]

c. 215201   page numbers：[a5]　, offsets：[a6]

a1 的指定答案： ✅ 3

a2 的指定答案： ✅ 13

a3 的指定答案： ✅ 41

a4 的指定答案： ✅ 111

a5 的指定答案： ✅ 210

a6 的指定答案： ✅ 161

a1 的正确答案：

评估方式	正确答案	区分大小写
✅ *完全匹配*	3	

a2 的正确答案：

评估方式	正确答案	区分大小写
✅ *完全匹配*	13	

a3 的正确答案：

评估方式	正确答案	区分大小写
✅ *完全匹配*	41	

a4 的正确答案:		
评估方式	**正确答案**	**区分大小写**
✅ *完全匹配*	111	
a5 的正确答案:		
评估方式	**正确答案**	**区分大小写**
✅ *完全匹配*	210	
a6 的正确答案:		
评估方式	**正确答案**	**区分大小写**
✅ *完全匹配*	161	

问题 2

得 10 分，满分 10 分

The BTV operating system has a 21-bit virtual address, yet on certain embedded devices, it has only a 16-bit physical address. It also has a 2-KB page size. How many entries are there in each of the following?

a. A conventional, single-level page table 答案(填10进制数):[a1]

b. An inverted page table 答案(填10进制数):[a2]

a1 的指定答案: ✅ 1024

a2 的指定答案: ✅ 32

a1 的正确答案:		
评估方式	**正确答案**	**区分大小写**
✅ *完全匹配*	1024	
a2 的正确答案:		
评估方式	**正确答案**	**区分大小写**
✅ *完全匹配*	32	

问题 3

得 10 分，满分 10 分

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）:[a1] bits

b. How many bits are required in the physical address?答案（填十进制数）:[a2] bits

a1 的指定答案: ✅ 20

a2 的指定答案: ✅ 18

a1 的正确答案:		
评估方式	**正确答案**	**区分大小写**
✅ *完全匹配*	20	
a2 的正确答案:		
评估方式	**正确答案**	**区分大小写**

✅ *完全匹配*	18

问题 4

得 36 分，满分 36 分

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 **[a1]**
2. 15M `process` put in **[a2]**
3. 185M `process` put in **[a3]**
4. 75M `process` put in **[a4]**
5. 175M `process` put in **[a5]**
6. 80M `process` put in **[a6]**

Best-fit

1. 200M `process` put in **[a7]**
2. 15M `process` put in **[a8]**
3. 185M `process` put in **[a9]**
4. 75M `process` put in **[a10]**
5. 175M `process` put in **[a11]**
6. 80M `process` put in **[a12]**

Worst-fit

1. 200M `process` put in **[a13]**
2. 15M `process` put in **[a14]**
3. 185M `process` put in **[a15]**
4. 75M `process` put in **[a16]**
5. 175M `process` put in **[a17]**
6. 80M `process` put in **[a18]**

所选答案： 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**

答案: 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**

<u>所有答案选项</u>

- 100MB partition
- 170MB partition
- 40MB partition
- 205MB partition
- 300MB partition
- 185MB partition
- must wait

问题 5

得 5 分，满分 10 分

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

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

a. If a memory reference takes 50 nanoseconds, how long does a paged memory reference take? 答案（填写数值）：[a1] 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）：[a2] ns

a1 的指定答案: ✅ 100

a2 的指定答案： ❌ 62.5

a1 的正确答案：		
评估方式	正确答案	区分大小写
✅ *完全匹配*	100	
a2 的正确答案：		
评估方式	正确答案	区分大小写
✅ *完全匹配*	64.5	

问题 6   得 10 分，满分 10 分

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: **[a1]**

    b. 1,10   答案: **[a2]**

    c. 2,500   答案: **[a3]**

    d. 3,400   答案: **[a4]**

    e. 4,112   答案: **[a5]**

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

a1 的指定答案： ✅ 649

a2 的指定答案： ✅ 2310

a3 的指定答案： ✅ invalid

a4 的指定答案： ✅ 1727

a5 的指定答案： ✅ invalid

a1 的正确答案：		
评估方式	正确答案	区分大小写
✅ *完全匹配*	649	
a2 的正确答案：		
评估方式	正确答案	区分大小写
✅ *完全匹配*	2310	
a3 的正确答案：		
评估方式	正确答案	区分大小写

✅ 包含	invalid

a4 的正确答案:

评估方式	正确答案	区分大小写
✅ 完全匹配	1727	

a5 的正确答案:

评估方式	正确答案	区分大小写
✅ 模式匹配	invalid	

2020年1月4日 星期六 下午04时03分03秒 CST

← **确定**