

EE3450 Hw5 - Question 6 (5.18)

總分 6/6 ?

Chapter 5 : Large and Fast: Exploiting Memory Hierarchy & Virtual Memory

0分, 共0分

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Question 6 (5.18)

6分, 共6分

[5.3] means you should have read Section 5.3. Under the Covers, to help you solve this exercise

In this exercise, we will examine space/time optimizations for page tables. The following list provides parameters of a virtual memory system.

| Virtual Address | Physical DRAM installed | Page Size | PTE Size |
|-----------------|-------------------------|-----------|----------|
| 43 bits | 16 GiB | 4 KiB | 4 bytes |



✓ 1. [5.7] For a single-level page table, how many page table entries (PTEs) 3/3
are needed? (2^N entries, $N=?$) *

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✓ 2. [5.7] How much physical memory is needed for storing the page 3/3
tables? *

- 2 GB
- 4 GB
- 8 GB
- 16 GB



這份表單是在 清華大學 中建立。

Google 表單

