

What is a page table? How is it used?

Virtual			MemoryAddress:	4096 bytes	
	20 bits	12 bits		4096 bytes	
				4096 bytes	
				4096 bytes	
				4096 bytes	
				4096 bytes	
				4096 bytes	
				4096 bytes	
				4096 bytes	
				4096 bytes	
				4096 bytes	
				

For a 32 bit system if each page is 4KB. How many entries are there? How many bytes are required to store the entire page table?

Using the above page design, how many memory reads are required to read a byte at address 0x200 ?

Using the two-level page table with page size 4KB, how many memory reads are required to read a byte at address 0x200 ?

What is an TLB? Why is it useful? How is it used?

How much memory does a 2 level page table require (assume data segment requirement requires 2 pages and the stack requires 2 pages; assume each entry in the directory contains 1024 page entries and each entry is 4 bytes)

Virtual MemoryAddress:

Why might a page be missing in memory? Where can it be found?

What is the dirty bit? Why is it useful?

What else can we store about each page?

Can two processes share the same piece of RAM?

Why is this useful?

Practice Interview Question: What is IPC? Give some examples and explain how they work!

Amdahl's law & merge challenge

What is the "global lock" solution to Dining Philosophers? Which Coffman condition does it prevent?