

QUIZ 2: CS 170

A virtual memory management system uses 32-bit virtual addresses and 24-bit physical addresses. The size of a page is 2KB (2048 bytes). Shown below is part of the page table for a process P. Assume that this process attempts to access the virtual address

0x0006E1FD

Which physical address does this virtual address resolve to? Please explain the steps that you perform to resolve this address.

Page Table:

Page Number	Frame Number
0x00	(not present)
0x01	(not present)
0x02	0xAF
...	...
0xD9	(not present)
0xDA	0xC04
0xDB	(not present)
0xDC	0x7C
0xDD	(not present)
0xDE	0xB48
...	...

Additional questions:

How many virtual pages does a process have in this system? How many frames are there in the physical memory?