

Lab8

虚拟地址

记住进程用的是虚拟地址。

当进程访问某个虚拟地址时，首先由虚拟地址得到其对应的虚拟地址页，然后去页表中看这页所对应的物理页是哪一页，

- 如果valid bit = 1，那么我们就找到了对应的物理地址页
- 如果valid bit = 0，那么我们需要先将该虚拟地址页从磁盘中拿出来，放到内存中，然后再修改页表

Exercise 1 - Working with CAMERA

Exercise 2 - Misses

我的方案

Virtual Memory and Paging

Physical Memory

Page 0 Frame	P00f0	P00f1	P00f2	P00f3	P00f4	P00f5	P00f6	P00f7
	P00f8	P00f9	P00f10	P00f11	P00f12	P00f13	P00f14	P00f15
	P00f16	P00f17	P00f18	P00f19	P00f20	P00f21	P00f22	P00f23
	P00f24	P00f25	P00f26	P00f27	P00f28	P00f29	P00f30	P00f31
Page 1 Frame	P10f0	P10f1	P10f2	P10f3	P10f4	P10f5	P10f6	P10f7
	P10f8	P10f9	P10f10	P10f11	P10f12	P10f13	P10f14	P10f15
	P10f16	P10f17	P10f18	P10f19	P10f20	P10f21	P10f22	P10f23
	P10f24	P10f25	P10f26	P10f27	P10f28	P10f29	P10f30	P10f31
Page 2 Frame	P60f0	P60f1	P60f2	P60f3	P60f4	P60f5	P60f6	P60f7
	P60f8	P60f9	P60f10	P60f11	P60f12	P60f13	P60f14	P60f15
	P60f16	P60f17	P60f18	P60f19	P60f20	P60f21	P60f22	P60f23
	P60f24	P60f25	P60f26	P60f27	P60f28	P60f29	P60f30	P60f31
Page 3 Frame	P70f0	P70f1	P70f2	P70f3	P70f4	P70f5	P70f6	P70f7
	P70f8	P70f9	P70f10	P70f11	P70f12	P70f13	P70f14	P70f15
	P70f16	P70f17	P70f18	P70f19	P70f20	P70f21	P70f22	P70f23
	P70f24	P70f25	P70f26	P70f27	P70f28	P70f29	P70f30	P70f31

Virtual Memory

Page 0
Page 1
Page 2
Page 3
Page 4
Page 5
Page 6
Page 7

Translation Lookaside Buffer

Virtual Page Number	Physical Page Number
0	0
1	1
6	2
7	3

TLB Hits 0 TLB Misses 10

Page Table

Frame Number	Valid Bit
0	1
1	1
2	0
3	0
4	0
5	0
6	1
7	1

Page Hits 0 Page Faults 10

Address Reference String

00
20
40
60
80
A0
C0
E0
00
20

Auto Generate Add. Ref. Str.
Self Generate Add. Ref. Str.

Virtual Address Bits

PAGE OFFSET

Physical Address Bits

PAGE OFFSET

PROGRESS UPDATE

This completes the runthrough.
Please click on "Restart", generate the Address Reference String OR click "Quit" to finish.

RestartNextBackQuit

Exercise 3 - Fixing our Faults