EECE.4810/EECE.5730: Operating Systems
Spring 2018

Lecture 19: Key Questions
April 11, 2018

1. What is the purpose of the dirty bit in a page table entry?

2. **Example:** Assume the current process uses the page table below:

Virtual page #	Valid bit	Reference bit	Dirty bit	Frame #
0	1	1	0	4
1	1	1	1	7
2	0	0	0	--
3	1	0	0	2
4	0	0	0	--
5	1	0	1	0

a. Which virtual pages are resident in physical memory?

b. Which resident pages are candidates for eviction?

c. Assuming 1 KB pages and 16-bit addresses, what physical addresses would the virtual addresses below map to?

i.   0x041C

ii. 0x08AD

iii. 0x157B