CS520—Spring 2013—Homework 12 Wednesday April 24

Question 1

What is the difference between direct-mapped caches and associative caches? Why do virtual memory systems use associative mapping of virtual pages to physical pages?

Question 2

What is a write-back cache? Why do virtual memory systems usually act like write-back caches?

Question 3

Virtual memory systems appear to require two accesses to physical memory for each access to virtual memory. Why? And, why is this not a problem in practice?