

Algorithm	values10k.dat		values100k.dat	
	Buffertest1	Buffertest2	Buffertest1	Buffertest2
Clock Sweep	00:00:00.20706 1	00:00:00.391149	00:00:00.326576	00:00:00.834966
LRU	00:00:00.26239 1	00:00:00.421536	00:00:00.335285	00:00:00.884615

From the table, we can see that Clock Sweep algorithm is always a little bit faster than LRU with the given tests. The main reason is a simple LRU has no memory, (so a page that been accessed many times in the past and not used for a while is actually the same as one that was accessed once only at that same time.) Therefore, scans of things bigger than memory is a problem for a LRU algorithm. It have to iterate through the buffer pool several times and then will create a lot overhead. Since the given tests are simply selecting the data with given values, and all of them is pretty big dataset, so such a scan will replace everything else in the cache with data that is only needed once. However, a Clock Sweep algorithm, where each time a page is referenced it is marked as unsuitable for eviction. When page that is up for eviction, the reference is cleared and it goes to the back of the list of eviction candidates.