Description of Lab1

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1.Design decisions

(1)Using ArrayList in Tuple to avoid Iterator.

(2)Throwing all pages in BufferPool instead of throwing only one when BufferPool is full.

(3)Using a simple hash function HeapPageId. It may cause a crash.

(3)Using a getNext method in DbFileIterator to avoid scan pages twice.

2.Top APIs are not changed. All new methods are private that is only used in the local class.

3.

(1)Missing replacement strategy in BufferPool, causing a clear to BufferPool every BufferPool.size times.

(2)Not ready for multithreads.

4.

It takes me 1.5 days to finish the lab1 and another half hour to finish the description. The most confusing point is that I firstly don't know how to call the catalog and the BufferPool. The DataBase class should be describe more.