## Lab1-Report

## 517030910412 陆晗

## 2020.4.4

**Design decision** The design decisions in Lab1 are quite few. I just finish the blank code. If you must pick some, I think there are two designs.

First, in **Catalog** I design a class **Table**. In order to find the corresponding table quickly and arrange the three information, I design two **map**, name2id map and id2table map respectively.

Second, in **HeapFile DbFileIterator**, I design two variables named **currentPid** and **tupleIterator**. The former is to decide which page should we load to BufferPool. And the later is to traverse the tuple in this page. This avoid to load the whole table and can make the space cost at a low level.

## API No change.

**Incomplete elements** I think none. If there exits, thanks very much to inform me and I will fill the hole as soon as quickly.

Others I spent two days in finishing the code. At the beginning, I am not familiar with Java and cost some time to search. I also want to find the time-saving cost function. Just like the concatenation of strings. I find using StringBuffer is much faster than my old habits  $\mathbf{s1} + \mathbf{s2}$ . Such these are interesting to find in java. It also took me a lot of time to get familiar with and understand the use of the interface and the structure. I may need more exercise.