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In the primary stages of the project, we simply adhered to the provided instructions and detailing that were written above many of necessary functions inside the code files. Many of the functions without a detailed explanation were merely setter and grabber functions that were simple enough to implement. Using the provided guidelines in the project handout, we didn't deviate too greatly from the detailed methods and hints provided in the project handout. However, even the provided documentation gave room to make certain modifications and decisions.

Most importantly, we decided to simply implement the custom hashCode() methods such that they could be called to simplify processes later on in the code. Using a lot of research, we discovered that calling Java.Objects.hash() provided a fairly streamlined implementation of what we were looking for.

Furthermore, in Catalog.java, creating a Table class structure greatly simplified and streamlined the code to appear more comprehensible and manageable.

In the both files, Catalog.java and BufferPool.java, we decided to use a ConcurrentHashMap in order to simplify what we researched to be "thread-safe operations within the database" when trying to find optimal data structures.

Despite attempting to follow the instructions and manage our environment, due to a rushed approach as well as test environment failures, we were unable to adequately test out all of the functions before the deadline. However, the logic in most functions is sound and should work, but we are not sure where the error lies. We are willing to schedule office hours to see if we can find where our errors are and to see if partial credit can be applied!