

Assignment 2 part 2

Group member:

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Compiling and running project:

Steps of compiling and running test:

1. Make clean
2. Make test.out
3. ./test.out

Steps of compiling and running gtest:

1. Make clean
2. Make gtest
3. ./gtest.out

Classes added and implemented:

BigQ this class is almost the same as what have been implemented in the a2_p1.

FileGenerator works as the class for both HeapFile and SortedFile to inherit, it only has virtual functions.

HeapFile which contains the functions to implement the heap file type, these two classes are also almost the same as a2_p1.

SortedFile which contains the functions to implement the sorted file type.

DBFile.cc and DBFile.h are the classes to connect "the front and the end" (just like application layer in some project, HeapFile and Sorted are like implement layer), direct different types of file to different classes to create or other functions.

Test result screenshot:

Test are based on the 1G tpch-dbgen on my own laptop.

Test1: test_create

Test2:test scan

Test3:test_query

Gtest result:

Steps of compiling and running gtest:

1. Make clean
2. Make gtest
3. ./gtest.out

There are four tests in the gtest.cc, the result is as follows.

```
qinxuanshi@qinxuanshi:~/Downloads/a2-2test$ ./gtest.out
[=====] Running 4 tests from 1 test suite.
[-----] Global test environment set-up.
[-----] 4 tests from TestMap
[ RUN     ] TestMap.CreateTest
==1
[ RUN     OK ] TestMap.CreateTest (1 ms)
[ RUN     ] TestMap.OpenTest
NumAtts = 0
[ RUN     OK ] TestMap.OpenTest (0 ms)
[ RUN     ] TestMap.CloseTest
NumAtts = 0
[ RUN     OK ] TestMap.CloseTest (0 ms)
[ RUN     ] TestMap.GetNextTest
NumAtts = 0
[ RUN     OK ] TestMap.GetNextTest (0 ms)
[-----] 4 tests from TestMap (1 ms total)

[-----] Global test environment tear-down
[=====] 4 tests from 1 test suite ran. (1 ms total)
[ PASSED ] 4 tests.
qinxuanshi@qinxuanshi:~/Downloads/a2-2test$
```