

## Ant test (1-8 页)

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问题 输出 调试控制台 文档 窗口
mc@mo-virtual-machine:~/from$ ant test
Buildfile: /home/mo/from/build.xml

compile:
[depend] The class simpledb.BTreeInternalPageIterator in file /home/mo/from/bin/src/simpledb/BTreeInternalPageIterator.class is out of date due to simpledb.R
ecordId but has not been deleted because its source file could not be determined
[depend] The class simpledb.BTreeInternalPageReverseIterator in file /home/mo/from/bin/src/simpledb/BTreeInternalPageReverseIterator.class is out of date due
to simpledb.RecordId but has not been deleted because its source file could not be determined
[depend] The class simpledb.BTreeFileIterator in file /home/mo/from/bin/src/simpledb/BTreeFileIterator.class is out of date due to simpledb.AbstractDbFileIte
rator but has not been deleted because its source file could not be determined
[depend] The class simpledb.BTreeSearchIterator in file /home/mo/from/bin/src/simpledb/BTreeSearchIterator.class is out of date due to simpledb.AbstractDbFil
eIterator but has not been deleted because its source file could not be determined
[depend] The class simpledb.TupleComparator in file /home/mo/from/bin/src/simpledb/TupleComparator.class is out of date due to simpledb.Tuple but has not bee
n deleted because its source file could not be determined
[depend] The class simpledb.BTreeLeafPageReverseIterator in file /home/mo/from/bin/src/simpledb/BTreeLeafPageReverseIterator.class is out of date due to simp
ledb.Tuple but has not been deleted because its source file could not be determined
[depend] The class simpledb.BTreeLeafPageIterator in file /home/mo/from/bin/src/simpledb/BTreeLeafPageIterator.class is out of date due to simpledb.Tuple but
has not been deleted because its source file could not be determined
[depend] The class simpledb.TupleArrayIterator in file /home/mo/from/bin/src/simpledb/TupleArrayIterator.class is out of date due to simpledb.Tuple but has n
ot been deleted because its source file could not be determined
[depend] Deleted 186 out of date files in 0 seconds
[javac] Compiling 79 source files to /home/mo/from/bin/src
[javac] /home/mo/from/src/java/simpledb/Catalog.java:171: warning: [unchecked] unchecked cast
[javac]         return (Integer) tables.get(index++).id;
[javac]                                     ^
[javac]         required: Integer
[javac]         found:    java.lang.Integer
[javac]       where Integer is a type-variable:
[javac]         Integer extends Object declared in class Catalog.TableIdIterator
[javac] 1 warning

testcompile:
[depend] Deleted 64 out of date files in 0 seconds
[javac] Compiling 54 source files to /home/mo/from/bin/test
[javac] Note: Some input files use or override a deprecated API.
[javac] Note: Recompile with -Xlint:deprecation for details.

test:

test:
[junit] Running simpledb.AggregateTest
[junit] Testsuite: simpledb.AggregateTest
[junit] Tests run: 8, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.092 sec
[junit] Tests run: 8, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.092 sec
[junit]
[junit] Testcase: getTupleDesc took 0.037 sec
[junit] Testcase: countStringAggregate took 0.002 sec
[junit] Testcase: sumStringGroupBy took 0.004 sec
[junit] Testcase: sumAggregate took 0.001 sec
[junit] Testcase: avgAggregate took 0.001 sec
[junit] Testcase: maxAggregate took 0 sec
[junit] Testcase: minAggregate took 0.001 sec
[junit] Testcase: rewind took 0.002 sec
[junit] Running simpledb.BTreeDeadlockTest
[junit] Testsuite: simpledb.BTreeDeadlockTest
[junit] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 3.655 sec
[junit] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 3.655 sec
[junit] ----- Standard Output -----
[junit] testReadWriteDeadlock constructing deadlock:
[junit] testReadWriteDeadlock resolved deadlock
[junit] ----- Standard Error -----
[junit] simpledb.TransactionAbortedException
[junit]   at simpledb.BufferPool.getPage(BufferPool.java:694)
[junit]   at simpledb.BTreeFile.getPage(BTreeFile.java:512)
[junit]   at simpledb.BTreeFile.findLeafPage(BTreeFile.java:219)
[junit]   at simpledb.BTreeFile.insertTuple(BTreeFile.java:546)
[junit]   at simpledb.BufferPool.insertTuple(BufferPool.java:808)
[junit]   at simpledb.BTreeUtility$BTreeWriter.run(BTreeUtility.java:522)
[junit] simpledb.TransactionAbortedException
[junit]   at simpledb.BufferPool.getPage(BufferPool.java:694)
[junit]   at simpledb.BTreeFile.getPage(BTreeFile.java:512)
[junit]   at simpledb.BTreeFile.getParentWithEmptySlots(BTreeFile.java:413)
[junit]   at simpledb.BTreeFile.splitInternalPage(BTreeFile.java:372)
[junit]   at simpledb.BTreeFile.getParentWithEmptySlots(BTreeFile.java:430)
[junit]   at simpledb.BTreeFile.splitLeafPage(BTreeFile.java:316)
[junit]   at simpledb.BTreeFile.insertTuple(BTreeFile.java:548)
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[junit] at simpledb.BufferPool.getPage(BufferPool.java:694)
[junit] at simpledb.BTreeFile.getPage(BTreeFile.java:512)
[junit] at simpledb.BTreeFile.findLeafPage(BTreeFile.java:219)
[junit] at simpledb.BTreeFile.insertTuple(BTreeFile.java:546)
[junit] at simpledb.BufferPool.insertTuple(BufferPool.java:808)
[junit] at simpledb.BTreeUtility$BTreeWriter.run(BTreeUtility.java:522)
[junit] -----
[junit]
[junit] Testcase: testReadWriteDeadlock took 3.636 sec
[junit] Running simpledb.BTreeFileDeleteTest
[junit] Testsuite: simpledb.BTreeFileDeleteTest
[junit] Tests run: 7, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.602 sec
[junit] Tests run: 7, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.602 sec
[junit]
[junit] Testcase: testStealFromRightLeafPage took 0.064 sec
[junit] Testcase: testMergeLeafPages took 0.015 sec
[junit] Testcase: testStealFromLeftInternalPage took 0.175 sec
[junit] Testcase: testStealFromRightInternalPage took 0.131 sec
[junit] Testcase: testMergeInternalPages took 0.16 sec
[junit] Testcase: testStealFromLeftLeafPage took 0.012 sec
[junit] Testcase: deleteTuple took 0.012 sec
[junit] Running simpledb.BTreeFileInsertTest
[junit] Testsuite: simpledb.BTreeFileInsertTest
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.237 sec
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.237 sec
[junit]
[junit] Testcase: testReusePage took 0.066 sec
[junit] Testcase: testSplitLeafPages took 0.01 sec
[junit] Testcase: testSplitInternalPages took 0.15 sec
[junit] Running simpledb.BTreeFileReadTest
[junit] Testsuite: simpledb.BTreeFileReadTest
[junit] Tests run: 7, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.168 sec
[junit] Tests run: 7, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.168 sec
[junit]
[junit] Testcase: testIteratorClose took 0.103 sec
[junit] Testcase: indexIterator took 0.022 sec
[junit] Testcase: testIteratorBasic took 0.009 sec
[junit] Testcase: getTupleDesc took 0.003 sec

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[junit] Testcase: numPages took 0.003 sec
[junit] Testcase: readPage took 0.003 sec
[junit] Testcase: getId took 0.007 sec
[junit] Running simpledb.BTreeHeaderPageTest
[junit] Testsuite: simpledb.BTreeHeaderPageTest
[junit] Tests run: 10, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.103 sec
[junit] Tests run: 10, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.103 sec
[junit]
[junit] Testcase: setPrevPageId took 0.045 sec
[junit] Testcase: setNextPageId took 0.001 sec
[junit] Testcase: testDirty took 0.001 sec
[junit] Testcase: getPrevPageId took 0.001 sec
[junit] Testcase: numSlots took 0 sec
[junit] Testcase: getEmptySlot took 0.005 sec
[junit] Testcase: getPageData took 0.005 sec
[junit] Testcase: getNextPageId took 0.001 sec
[junit] Testcase: getId took 0.001 sec
[junit] Testcase: getSlot took 0.002 sec
[junit] Running simpledb.BTreeInternalPageTest
[junit] Testsuite: simpledb.BTreeInternalPageTest
[junit] Tests run: 11, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.158 sec
[junit] Tests run: 11, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.158 sec
[junit]
[junit] Testcase: deleteNonexistentEntry took 0.023 sec
[junit] Testcase: deleteEntry took 0.003 sec
[junit] Testcase: getParentId took 0.002 sec
[junit] Testcase: setParentId took 0.001 sec
[junit] Testcase: testReverseIterator took 0.002 sec
[junit] Testcase: getNumEmptySlots took 0.001 sec
[junit] Testcase: testDirty took 0.001 sec
[junit] Testcase: testIterator took 0.001 sec
[junit] Testcase: getId took 0.001 sec
[junit] Testcase: addEntry took 0.103 sec
[junit] Testcase: getSlot took 0.001 sec
[junit] Running simpledb.BTreeLeafPageTest
[junit] Testsuite: simpledb.BTreeLeafPageTest
[junit] Tests run: 14, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.118 sec
[junit] Tests run: 14, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.118 sec

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[junit]
[junit] Testcase: addTuple took 0.065 sec
[junit] Testcase: deleteNonexistentTuple took 0.002 sec
[junit] Testcase: deleteTuple took 0.002 sec
[junit] Testcase: getRightSiblingId took 0.001 sec
[junit] Testcase: getParentId took 0.002 sec
[junit] Testcase: getLeftSiblingId took 0.001 sec
[junit] Testcase: setRightSiblingId took 0.002 sec
[junit] Testcase: getNumEmptySlots took 0.001 sec
[junit] Testcase: testDirty took 0.001 sec
[junit] Testcase: setParentId took 0 sec
[junit] Testcase: setLeftSiblingId took 0.001 sec
[junit] Testcase: testIterator took 0 sec
[junit] Testcase: getId took 0.004 sec
[junit] Testcase: getSlot took 0.002 sec
[junit] Running simpledb.BTreePageIdTest
[junit] Testsuite: simpledb.BTreePageIdTest
[junit] Tests run: 4, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.02 sec
[junit] Tests run: 4, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.02 sec
[junit]
[junit] Testcase: pageno took 0.005 sec
[junit] Testcase: testHashCode took 0 sec
[junit] Testcase: getTableId took 0 sec
[junit] Testcase: equals took 0.001 sec
[junit] Running simpledb.BTreeRootPtrPageTest
[junit] Testsuite: simpledb.BTreeRootPtrPageTest
[junit] Tests run: 6, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.042 sec
[junit] Tests run: 6, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.042 sec
[junit]
[junit] Testcase: getHeaderId took 0.022 sec
[junit] Testcase: setHeaderId took 0 sec
[junit] Testcase: getRootId took 0 sec
[junit] Testcase: testDirty took 0.001 sec
[junit] Testcase: setRootId took 0 sec
[junit] Testcase: getId took 0 sec
[junit] Running simpledb.BufferPoolWriteTest
[junit] Testsuite: simpledb.BufferPoolWriteTest
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.177 sec

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[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.177 sec
[junit]
[junit] Testcase: deleteTuple took 0.093 sec
[junit] Testcase: handleManyDirtyPages took 0.032 sec
[junit] Testcase: insertTuple took 0.04 sec
[junit] Running simpledb.CatalogTest
[junit] Testsuite: simpledb.CatalogTest
[junit] Tests run: 5, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.022 sec
[junit] Tests run: 5, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.022 sec
[junit]
[junit] Testcase: handleDuplicateNames took 0.009 sec
[junit] Testcase: getTableId took 0.001 sec
[junit] Testcase: handleDuplicateIds took 0.001 sec
[junit] Testcase: getTupleDesc took 0 sec
[junit] Testcase: getDatabaseFile took 0 sec
[junit] Running simpledb.DeadlockTest
[junit] Testsuite: simpledb.DeadlockTest
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 2.061 sec
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 2.061 sec
[junit] ----- Standard Output -----
[junit] testWriteWriteDeadlock constructing deadlock:
[junit] testWriteWriteDeadlock resolved deadlock
[junit] testUpgradeWriteDeadlock constructing deadlock:
[junit] testUpgradeWriteDeadlock resolved deadlock
[junit] testReadWriteDeadlock constructing deadlock:
[junit] testReadWriteDeadlock resolved deadlock
[junit] ----- Standard Error -----
[junit] simpledb.TransactionAbortedException
[junit]   at simpledb.BufferPool.getPage(BufferPool.java:694)
[junit]   at simpledb.TestUtil$LockGrabber.run(TestUtil.java:336)
[junit] simpledb.TransactionAbortedException
[junit]   at simpledb.BufferPool.getPage(BufferPool.java:694)
[junit]   at simpledb.TestUtil$LockGrabber.run(TestUtil.java:336)
[junit] simpledb.TransactionAbortedException
[junit]   at simpledb.BufferPool.getPage(BufferPool.java:694)
[junit]   at simpledb.TestUtil$LockGrabber.run(TestUtil.java:336)
[junit] simpledb.TransactionAbortedException

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[junit] at simpledb.BufferPool.getPage(BufferPool.java:694)
[junit] at simpledb.TestUtil$LockGrabber.run(TestUtil.java:336)
[junit] simpledb.TransactionAbortedException
[junit] at simpledb.BufferPool.getPage(BufferPool.java:694)
[junit] at simpledb.TestUtil$LockGrabber.run(TestUtil.java:336)
[junit] simpledb.TransactionAbortedException
[junit] at simpledb.BufferPool.getPage(BufferPool.java:694)
[junit] at simpledb.TestUtil$LockGrabber.run(TestUtil.java:336)
[junit] simpledb.TransactionAbortedException
[junit] at simpledb.BufferPool.getPage(BufferPool.java:694)
[junit] at simpledb.TestUtil$LockGrabber.run(TestUtil.java:336)
[junit] simpledb.TransactionAbortedException
[junit] at simpledb.BufferPool.getPage(BufferPool.java:694)
[junit] at simpledb.TestUtil$LockGrabber.run(TestUtil.java:336)
[junit] simpledb.TransactionAbortedException
[junit] at simpledb.BufferPool.getPage(BufferPool.java:694)
[junit] at simpledb.TestUtil$LockGrabber.run(TestUtil.java:336)
[junit] simpledb.TransactionAbortedException
[junit] at simpledb.BufferPool.getPage(BufferPool.java:694)
[junit] at simpledb.TestUtil$LockGrabber.run(TestUtil.java:336)
[junit] -----
[junit]
[junit] Testcase: testWriteWriteDeadlock took 0.755 sec
[junit] Testcase: testUpgradeWriteDeadlock took 0.538 sec
[junit] Testcase: testReadWriteDeadlock took 0.755 sec
[junit] Running simpledb.FilterTest
[junit] Testsuite: simpledb.FilterTest
[junit] Tests run: 6, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.052 sec
[junit] Tests run: 6, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.052 sec
[junit]
[junit] Testcase: filterAllLessThan took 0.011 sec
[junit] Testcase: filterEqual took 0.002 sec
[junit] Testcase: filterEqualNoTuples took 0.001 sec
[junit] Testcase: filterSomeLessThan took 0 sec
[junit] Testcase: getTupleDesc took 0 sec

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[junit] Testcase: rewind took 0 sec
[junit] Running simpledb.HashEquiJoinTest
[junit] Testsuite: simpledb.HashEquiJoinTest
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.521 sec
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.521 sec
[junit] ----- Standard Output -----
[junit] JOIN PRODUCED 300010 ROWS
[junit] JOIN PRODUCED 300010 ROWS
[junit] -----
[junit]
[junit] Testcase: bigJoin took 0.508 sec
[junit] Testcase: getTupleDesc took 0.001 sec
[junit] Testcase: eqJoin took 0 sec
[junit] Running simpledb.HeapFileReadTest
[junit] Testsuite: simpledb.HeapFileReadTest
[junit] Tests run: 6, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.076 sec
[junit] Tests run: 6, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.076 sec
[junit]
[junit] Testcase: readPage took 0.035 sec
[junit] Testcase: testIteratorBasic took 0.004 sec
[junit] Testcase: testIteratorClose took 0.009 sec
[junit] Testcase: getTupleDesc took 0.002 sec
[junit] Testcase: numPages took 0.001 sec
[junit] Testcase: getId took 0.002 sec
[junit] Running simpledb.HeapFileWriteTest
[junit] Testsuite: simpledb.HeapFileWriteTest
[junit] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.13 sec
[junit] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.13 sec
[junit]
[junit] Testcase: addTuple took 0.121 sec
[junit] Running simpledb.HeapPageIdTest
[junit] Testsuite: simpledb.HeapPageIdTest
[junit] Tests run: 4, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.017 sec
[junit] Tests run: 4, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.017 sec
[junit]
[junit] Testcase: pageno took 0.004 sec
[junit] Testcase: testHashCode took 0 sec
[junit] Testcase: getTableId took 0 sec

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[junit] Testcase: equals took 0 sec
[junit] Running simpledb.HeapPageReadTest
[junit] Testsuite: simpledb.HeapPageReadTest
[junit] Tests run: 4, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.029 sec
[junit] Tests run: 4, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.029 sec
[junit]
[junit] Testcase: testIterator took 0.011 sec
[junit] Testcase: getNumEmptySlots took 0.002 sec
[junit] Testcase: getId took 0.002 sec
[junit] Testcase: getSlot took 0.001 sec
[junit] Running simpledb.HeapPageWriteTest
[junit] Testsuite: simpledb.HeapPageWriteTest
[junit] Tests run: 4, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.091 sec
[junit] Tests run: 4, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.091 sec
[junit]
[junit] Testcase: deleteNonexistentTuple took 0.033 sec
[junit] Testcase: deleteTuple took 0.002 sec
[junit] Testcase: testDirty took 0.002 sec
[junit] Testcase: addTuple took 0.04 sec
[junit] Running simpledb.InsertTest
[junit] Testsuite: simpledb.InsertTest
[junit] Tests run: 2, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.08 sec
[junit] Tests run: 2, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.08 sec
[junit]
[junit] Testcase: getNext took 0.048 sec
[junit] Testcase: getTupleDesc took 0.002 sec
[junit] Running simpledb.IntHistogramTest
[junit] Testsuite: simpledb.IntHistogramTest
[junit] Tests run: 8, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.379 sec
[junit] Tests run: 8, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.379 sec
[junit]
[junit] Testcase: opGreaterThanTest took 0.003 sec
[junit] Testcase: opGreaterThanOrEqualsTest took 0 sec
[junit] Testcase: opLessThanOrEqualsTest took 0 sec
[junit] Testcase: negativeRangeTest took 0 sec
[junit] Testcase: opEqualsTest took 0.001 sec
[junit] Testcase: orderOfGrowthTest took 0.353 sec
[junit] Testcase: opLessThanTest took 0.001 sec

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[junit] Testcase: opNotEqualsTest took 0 sec
[junit] Running simpledb.IntegerAggregatorTest
[junit] Testsuite: simpledb.IntegerAggregatorTest
[junit] Tests run: 5, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.025 sec
[junit] Tests run: 5, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.025 sec
[junit]
[junit] Testcase: mergeAvg took 0.01 sec
[junit] Testcase: testIterator took 0 sec
[junit] Testcase: mergeSum took 0.001 sec
[junit] Testcase: mergeMin took 0 sec
[junit] Testcase: mergeMax took 0 sec
[junit] Running simpledb.JoinOptimizerTest
[junit] Testsuite: simpledb.JoinOptimizerTest
[junit] Tests run: 5, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 11.61 sec
[junit] Tests run: 5, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 11.61 sec
[junit] ----- Standard Output -----
[junit] tableId1: -1093864749
[junit] tableId2: -789675551
[junit] Added scan of table t1
[junit] Added scan of table t2
[junit] Added join between t1.c1 and t2.c2
[junit] Added select list field null.*
[junit] Added scan of table t1
[junit] Added scan of table t2
[junit] Added join between t1.c1 and t2.c2
[junit] Added select list field null.*
[junit] Added scan of table t1
[junit] Added scan of table t2
[junit] Added join between t1.c3 and t2.c4
[junit] Added select list field null.*
[junit] Added scan of table t1
[junit] Added scan of table t2
[junit] Added join between t1.c8 and t2.c7
[junit] Added select list field null.*
[junit] tableId1: -715085508
[junit] tableId2: 317233902
[junit] Added scan of table t1
[junit] Added scan of table t2

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[junit] Added scan of table t1
[junit] Added scan of table t2
[junit] Added join between t1.c8 and t2.c7
[junit] Added select list field null.*
[junit] tableId1: 1630034419
[junit] tableId2: 444613804
[junit] Added scan of table emp
[junit] Added scan of table dept
[junit] Added scan of table hobbies
[junit] Added scan of table hobby
[junit] Added join between emp.c1 and dept.c0
[junit] Added join between hobbies.c0 and emp.c2
[junit] Added join between hobbies.c1 and hobby.c0
[junit] Added select list field null.*
[junit] tableId1: 2085292043
[junit] tableId2: 597780491
[junit] Added scan of table bigTable
[junit] Added scan of table a
[junit] Added scan of table b
[junit] Added scan of table c
[junit] Added scan of table d
[junit] Added scan of table e
[junit] Added scan of table f
[junit] Added scan of table g
[junit] Added scan of table h
[junit] Added scan of table i
[junit] Added scan of table j
[junit] Added scan of table k
[junit] Added scan of table l
[junit] Added scan of table m
[junit] Added scan of table n
[junit] Added join between bigTable.c0 and n.c0
[junit] Added join between a.c1 and b.c1
[junit] Added join between b.c0 and c.c0
[junit] Added join between c.c1 and d.c1
[junit] Added join between d.c0 and e.c0
[junit] Added join between e.c1 and f.c1
[junit] Added join between f.c0 and g.c0
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[junit] Added join between g.c1 and h.c1
[junit] Added join between h.c0 and i.c0
[junit] Added join between i.c1 and j.c1
[junit] Added join between j.c0 and k.c0
[junit] Added join between k.c1 and l.c1
[junit] Added join between l.c0 and m.c0
[junit] Added join between m.c1 and n.c1
[junit] Aggregate field is a.c0, agg fun is : COUNT
[junit] Added select list field a.c0
[junit] with aggregator COUNT
[junit] tableId1: -1693199101
[junit] tableId2: -2117401179
[junit] Added scan of table a
[junit] Added scan of table b
[junit] Added scan of table c
[junit] Added scan of table d
[junit] Added scan of table e
[junit] Added scan of table f
[junit] Added scan of table g
[junit] Added scan of table h
[junit] Added scan of table i
[junit] Added join between a.c1 and b.c1
[junit] Added join between b.c0 and c.c0
[junit] Added join between c.c1 and d.c1
[junit] Added join between d.c0 and e.c0
[junit] Added join between e.c1 and f.c1
[junit] Added join between f.c0 and g.c0
[junit] Added join between g.c1 and h.c1
[junit] Added join between h.c0 and i.c0
[junit] Aggregate field is a.c0, agg fun is : COUNT
[junit] Added select list field a.c0
[junit] with aggregator COUNT
[junit] -----
[junit]
[junit] Testcase: estimateJoinCostTest took 0.247 sec
[junit] Testcase: estimateJoinCardinality took 0.129 sec
[junit] Testcase: orderJoinsTest took 2.317 sec
[junit] Testcase: bigOrderJoinsTest took 8.85 sec
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[junit] Testcase: nonequalityOrderJoinsTest took 0.055 sec
[junit] Running simpledb.JoinPredicateTest
[junit] Testsuite: simpledb.JoinPredicateTest
[junit] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.026 sec
[junit] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.026 sec
[junit]
[junit] Testcase: filterVaryingVals took 0.01 sec
[junit] Running simpledb.JoinTest
[junit] Testsuite: simpledb.JoinTest
[junit] Tests run: 4, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.042 sec
[junit] Tests run: 4, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.042 sec
[junit]
[junit] Testcase: getTupleDesc took 0.012 sec
[junit] Testcase: eqJoin took 0.001 sec
[junit] Testcase: gtJoin took 0.002 sec
[junit] Testcase: rewind took 0.001 sec
[junit] Running simpledb.LockingTest
[junit] Testsuite: simpledb.LockingTest
[junit] Tests run: 9, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 1.44 sec
[junit] Tests run: 9, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 1.44 sec
[junit]
[junit] Testcase: acquireReadWriteLocksOnSamePage took 0.226 sec
[junit] Testcase: acquireWriteReadLocksOnSamePage took 0.152 sec
[junit] Testcase: acquireReadWriteLocksOnTwoPages took 0.137 sec
[junit] Testcase: acquireWriteLocksOnTwoPages took 0.152 sec
[junit] Testcase: acquireReadLocksOnTwoPages took 0.149 sec
[junit] Testcase: lockUpgrade took 0.235 sec
[junit] Testcase: acquireWriteAndReadLocks took 0.158 sec
[junit] Testcase: acquireThenRelease took 0.051 sec
[junit] Testcase: acquireReadLocksOnSamePage took 0.139 sec
[junit] Running simpledb.PredicateTest
[junit] Testsuite: simpledb.PredicateTest
[junit] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.041 sec
[junit] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.041 sec
[junit]
[junit] Testcase: filter took 0.024 sec
[junit] Running simpledb.RecordIdTest
[junit] Testsuite: simpledb.RecordIdTest

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[junit] Tests run: 4, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.049 sec
[junit] Tests run: 4, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.049 sec
[junit]
[junit] Testcase: getPageId took 0.016 sec
[junit] Testcase: tupleNo took 0 sec
[junit] Testcase: hCode took 0.001 sec
[junit] Testcase: equals took 0 sec
[junit] Running simpledb.StringAggregatorTest
[junit] Testsuite: simpledb.StringAggregatorTest
[junit] Tests run: 2, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.031 sec
[junit] Tests run: 2, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.031 sec
[junit]
[junit] Testcase: testIterator took 0.01 sec
[junit] Testcase: mergeCount took 0.001 sec
[junit] Running simpledb.TableStatsTest
[junit] Testsuite: simpledb.TableStatsTest
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 2.002 sec
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 2.002 sec
[junit]
[junit] Testcase: estimateScanCostTest took 1.733 sec
[junit] Testcase: estimateTableCardinalityTest took 0.134 sec
[junit] Testcase: estimateSelectivityTest took 0.103 sec
[junit] Running simpledb.TransactionTest
[junit] Testsuite: simpledb.TransactionTest
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.271 sec
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.271 sec
[junit]
[junit] Testcase: attemptTransactionTwice took 0.16 sec
[junit] Testcase: commitTransaction took 0.026 sec
[junit] Testcase: abortTransaction took 0.048 sec
[junit] Running simpledb.TupleDescTest
[junit] Testsuite: simpledb.TupleDescTest
[junit] Tests run: 6, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.088 sec
[junit] Tests run: 6, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.088 sec
[junit]
[junit] Testcase: nameToId took 0.052 sec
[junit] Testcase: numFields took 0.001 sec
[junit] Testcase: testEquals took 0 sec

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[junit] Testsuite: simpledb.TableStatsTest
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 2.002 sec
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 2.002 sec
[junit]
[junit] Testcase: estimateScanCostTest took 1.733 sec
[junit] Testcase: estimateTableCardinalityTest took 0.134 sec
[junit] Testcase: estimateSelectivityTest took 0.103 sec
[junit] Running simpledb.TransactionTest
[junit] Testsuite: simpledb.TransactionTest
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.271 sec
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.271 sec
[junit]
[junit] Testcase: attemptTransactionTwice took 0.16 sec
[junit] Testcase: commitTransaction took 0.026 sec
[junit] Testcase: abortTransaction took 0.048 sec
[junit] Running simpledb.TupleDescTest
[junit] Testsuite: simpledb.TupleDescTest
[junit] Tests run: 6, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.088 sec
[junit] Tests run: 6, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.088 sec
[junit]
[junit] Testcase: nameToId took 0.052 sec
[junit] Testcase: numFields took 0.001 sec
[junit] Testcase: testEquals took 0 sec
[junit] Testcase: combine took 0 sec
[junit] Testcase: getType took 0.001 sec
[junit] Testcase: getSize took 0.001 sec
[junit] Running simpledb.TupleTest
[junit] Testsuite: simpledb.TupleTest
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.015 sec
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.015 sec
[junit]
[junit] Testcase: modifyFields took 0.005 sec
[junit] Testcase: getTupleDesc took 0 sec
[junit] Testcase: modifyRecordId took 0.001 sec

BUILD SUCCESSFUL
Total time: 38 seconds
mo@mo-virtual-machine:~/from$

```

## Ant systemtest

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问题  输出  调试控制台  终端  窗口
BUILD SUCCESSFUL
Total time: 38 seconds
mo@mo-virtual-machine:~/from$ ant systemtest
Buildfile: /home/mo/from/build.xml

compile:
[javac] Compiling 1 source file to /home/mo/from/bin/src

testcompile:
[javac] Compiling 2 source files to /home/mo/from/bin/test

systemtest:
[junit] Running simpledb.systemtest.AbortEvictionTest
[junit] Testsuite: simpledb.systemtest.AbortEvictionTest
[junit] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.154 sec
[junit] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.154 sec
[junit]
[junit] Testcase: testDoNotEvictDirtyPages took 0.142 sec
[junit] Running simpledb.systemtest.AggregateTest
[junit] Testsuite: simpledb.systemtest.AggregateTest
[junit] Tests run: 6, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.205 sec
[junit] Tests run: 6, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.205 sec
[junit]
[junit] Testcase: testSum took 0.093 sec
[junit] Testcase: testMin took 0.01 sec
[junit] Testcase: testMax took 0.008 sec
[junit] Testcase: testCount took 0.011 sec
[junit] Testcase: testAverage took 0.03 sec
[junit] Testcase: testAverageNoGroup took 0.02 sec
[junit] Running simpledb.systemtest.BTreeFileDeleteTest
[junit] Testsuite: simpledb.systemtest.BTreeFileDeleteTest
[junit] Tests run: 6, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 6.04 sec
[junit] Tests run: 6, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 6.04 sec
[junit]
[junit] Testcase: testDeleteRootPage took 0.116 sec
[junit] Testcase: testReuseDeletedPages took 0.104 sec
[junit] Testcase: testRedistributeInternalPages took 5 sec

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[junit] Testcase: testDeleteInternalPages took 0.777 sec
[junit] Testcase: testRedistributeLeafPages took 0.007 sec
[junit] Testcase: testMergeLeafPages took 0.018 sec
[junit] Running simpledb.systemtest.BTreeFileInsertTest
[junit] Testsuite: simpledb.systemtest.BTreeFileInsertTest
[junit] Tests run: 5, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 5.04 sec
[junit] Tests run: 5, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 5.04 sec
[junit]
[junit] Testcase: testSplitRootPage took 4.161 sec
[junit] Testcase: testSplitInternalPage took 0.656 sec
[junit] Testcase: addDuplicateTuples took 0.137 sec
[junit] Testcase: testSplitLeafPage took 0.033 sec
[junit] Testcase: addTuple took 0.035 sec
[junit] Running simpledb.systemtest.BTreeScanTest
[junit] Testsuite: simpledb.systemtest.BTreeScanTest
[junit] Tests run: 4, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 1.689 sec
[junit] Tests run: 4, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 1.689 sec
[junit]
[junit] Testcase: testReadPage took 0.333 sec
[junit] Testcase: testRewindPredicates took 0.044 sec
[junit] Testcase: testSmall took 1.285 sec
[junit] Testcase: testRewind took 0.015 sec
[junit] Running simpledb.systemtest.DeleteTest
[junit] Testsuite: simpledb.systemtest.DeleteTest
[junit] Tests run: 5, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.354 sec
[junit] Tests run: 5, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.354 sec
[junit]
[junit] Testcase: testEquals took 0.153 sec
[junit] Testcase: testLessThan took 0.061 sec
[junit] Testcase: testLessThanOrEq took 0.051 sec
[junit] Testcase: testGreaterThan took 0.042 sec
[junit] Testcase: testGreaterThanOrEq took 0.028 sec
[junit] Running simpledb.systemtest.EvictionTest
[junit] Testsuite: simpledb.systemtest.EvictionTest
[junit] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 1.776 sec
[junit] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 1.776 sec
[junit] ----- Standard Output -----
[junit] EvictionTest creating large table

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[junit] ----- Standard Output -----
[junit] EvictionTest creating large table
[junit] EvictionTest scanning large table
[junit] EvictionTest scan complete, testing memory usage of scan
[junit] -----
[junit]
[junit] Testcase: testHeapFileScanWithManyPages took 1.75 sec
[junit] Running simpledb.systemtest.FilterTest
[junit] Testsuite: simpledb.systemtest.FilterTest
[junit] Tests run: 5, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.209 sec
[junit] Tests run: 5, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.209 sec
[junit]
[junit] Testcase: testEquals took 0.104 sec
[junit] Testcase: testLessThan took 0.023 sec
[junit] Testcase: testLessThanOrEq took 0.022 sec
[junit] Testcase: testGreaterThan took 0.023 sec
[junit] Testcase: testGreaterThanOrEq took 0.016 sec
[junit] Running simpledb.systemtest.HashEquiJoinTest
[junit] Testsuite: simpledb.systemtest.HashEquiJoinTest
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.075 sec
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.075 sec
[junit]
[junit] Testcase: testSingleMatch took 0.048 sec
[junit] Testcase: testNoMatch took 0.006 sec
[junit] Testcase: testMultipleMatch took 0.008 sec
[junit] Running simpledb.systemtest.InsertTest
[junit] Testsuite: simpledb.systemtest.InsertTest
[junit] Tests run: 4, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.091 sec
[junit] Tests run: 4, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.091 sec
[junit]
[junit] Testcase: testEmptyToOne took 0.054 sec
[junit] Testcase: testOneToEmpty took 0.012 sec
[junit] Testcase: testOneToOne took 0.007 sec
[junit] Testcase: testEmptyToEmpty took 0.004 sec
[junit] Running simpledb.systemtest.JoinTest
[junit] Testsuite: simpledb.systemtest.JoinTest
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.112 sec
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.112 sec

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问题 输出 调试控制台 终端 窗口
[junit] Testcase: testSingleMatch took 0.078 sec
[junit] Testcase: testNoMatch took 0.005 sec
[junit] Testcase: testMultipleMatch took 0.007 sec
[junit] Running simpledb.systemtest.QueryTest
[junit] Testsuite: simpledb.systemtest.QueryTest
[junit] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 2.471 sec
[junit] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 2.471 sec
[junit] ----- Standard Output -----
[junit] Started a new transaction tid = 9
[junit] Added scan of table emp
[junit] Added scan of table dept
[junit] Added scan of table hobbies
[junit] Added scan of table hobby
[junit] Added join between emp.c1 and dept.c0
[junit] Added join between hobbies.c0 and emp.c2
[junit] Added join between hobbies.c1 and hobby.c0
[junit] Added select list field null.*
[junit] The query plan is:
[junit]
      π(emp.c0,emp.c1,emp.c2,emp.c3,emp.c4,emp.c5,dept.c0,dept.c1,dept.c2,hobbie
hobby.c1,hobby.c2,hobby.c3,hobby.c4,hobby.c5),card:200000
      |
      ⋈(hobbies.c1=hobby.c0),card:200000
      |
      ⋈(emp.c2=hobbies.c0),card:200000
      |
      ⋈(emp.c1=dept.c0),card:1526
      /      \
    σ(emp.c3<1000),card:1526  scan(hobbies)
    |                        |
  scan(emp)                scan(hobby)
    |                        |
emp.c0 emp.c1 emp.c2 emp.c3 emp.c4 emp.c5 dept.c0 dept.c1 dept.c2 hobbies.c0 hobbies.c1 hobby.c0
hobby.c3 hobby.c4 hobby.c5
[junit] -----
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```

```
问题 输出 调试控制台 终端 窗口
[junit] -----
[junit] Transaction 9 aborted because of unhandled error
[junit] ----- Standard Error -----
[junit] simpledb.DbException: 2
[junit]   at simpledb.Parser.processNextStatement(Parser.java:558)
[junit]   at simpledb.Parser.processNextStatement(Parser.java:497)
[junit]   at simpledb.systemtest.QueryTest.queryTest(QueryTest.java:82)
[junit]   at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
[junit]   at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62)
[junit]   at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
[junit]   at java.lang.reflect.Method.invoke(Method.java:498)
[junit]   at org.junit.runners.model.FrameworkMethod$1.runReflectiveCall(FrameworkMethod.java:44)
[junit]   at org.junit.internal.runners.model.ReflectiveCallable.run(ReflectiveCallable.java:15)
[junit]   at org.junit.runners.model.FrameworkMethod.invokeExplosively(FrameworkMethod.java:41)
[junit]   at org.junit.internal.runners.statements.InvokeMethod.evaluate(InvokeMethod.java:20)
[junit]   at org.junit.internal.runners.statements.FailOnTimeout$1.call(FailOnTimeout.java:32)
[junit]   at java.util.concurrent.FutureTask.run(FutureTask.java:266)
[junit]   at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149)
[junit]   at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624)
[junit]   at java.lang.Thread.run(Thread.java:750)
[junit] -----
[junit] Testcase: queryTest took 2.457 sec
[junit] Running simpledb.systemtest.ScanTest
[junit] Testsuite: simpledb.systemtest.ScanTest
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.679 sec
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.679 sec
[junit] Testcase: testRewind took 0.072 sec
[junit] Testcase: testCache took 0.369 sec
[junit] Testcase: testSmall took 0.217 sec
[junit] Running simpledb.systemtest.TransactionTest
[junit] Testsuite: simpledb.systemtest.TransactionTest
[junit] Tests run: 5, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 13.782 sec
[junit] Tests run: 5, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 13.782 sec
[junit]
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[junit] -----
[junit]
[junit] Testcase: queryTest took 2.457 sec
[junit] Running simpledb.systemtest.ScanTest
[junit] Testsuite: simpledb.systemtest.ScanTest
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.679 sec
[junit] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.679 sec
[junit]
[junit] Testcase: testRewind took 0.072 sec
[junit] Testcase: testCache took 0.369 sec
[junit] Testcase: testSmall took 0.217 sec
[junit] Running simpledb.systemtest.TransactionTest
[junit] Testsuite: simpledb.systemtest.TransactionTest
[junit] Tests run: 5, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 13.782 sec
[junit] Tests run: 5, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 13.782 sec
[junit]
[junit] Testcase: testSingleThread took 0.089 sec
[junit] Testcase: testAllDirtyFails took 0.067 sec
[junit] Testcase: testTwoThreads took 0.326 sec
[junit] Testcase: testFiveThreads took 2.541 sec
[junit] Testcase: testTenThreads took 10.742 sec

BUILD SUCCESSFUL
Total time: 38 seconds
msys2 virtual machine: /usr/bin/
```