Assignment 2 - Phase 2 report

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As2BenchRte
In this file, we had done the same logic as TAs did, which is to produce the correct probability rate between read and write, given the readWriteConstantValue. Then return different executors depending on the current type we got.

UpdateItemPriceTxnParamGen
In this file, at the part that generates which item's price should be raised and also the amount it should be raised, what we have done is similar to TAs. The differences between our code and TAs' are the parameter "MAX_RAISE" is not added in our constants and the way to put Id and raise into the parameter list but that has the same effect. Also, we learn how to implement and send a customized object from function A to B correctly from the solution code. In our implementation, we use an object arrayList, which stores prices and ids, to send and decode the data in orders, but we think the solution is better.

StatisticMgr
In this file, we add the function to produce another required report as TAs did, but the detail of implementation is quite different. The biggest difference is that we put all codes in one function, however TAs' separate the codes into different functions. We think that the way TAs do is better because the more modular the program is, the more readable the code is. Furthermore, it is easier to debug. There still exist some little difference between our code and TAs', such as boundary checking, and so on. We need to be more careful in the future.

UpdateItemPriceTxnProc
The solution use native ways to execute SQL queries, VanillaDB.newPlanner.createQueryPlan(), VanillaDB.newPlanner.executeUpdate(), rather than our implementation using the wrapped functions that the "readItem" part used. Also, the solution wrapped the updatePrice logic, which is better than explicitly written in the main code, as our code does.

UpdateItemTxnJdbcJob
We use the parameter helper to prepare for the inputs, which makes our implementation consistent in this part and the stored procedure part.
The solution extracts the code of updatePrice, which makes the logic of the main code clear.

UpdateItemPriceTxnParamHelper
There are no implementations of getResultSetSchema and newResultSetRecord in our code, which are not used by other code. However, we should implement these functions to get the expected result while we try to get the table values after they are updated.