16 – Everything You Always Wanted to Know About
Compiled and Vectorized Queries But Were Afraid to Ask

1. Overview of Idea
    Data-centric compilation and vectorized execution is mainstream of query processing model. But comparison of these two query processing model was not done. By comparing these model, we can know which model is good at which query patterns.

2. Main Finding

    Vectorized processing is good at parallel access, compile time, profiling, data-centric compilation is good at computation speed, OLTP, and language support.

3. Systems used and its Specifications
    to compare query processing models only, custom systems Tectorwise and Typer are used, which are similar to Vectorwise and Hyper.

4. Workloads evaluated
    TPC-H and some microbenchmarks are used.
    Which are aggregation, selective filters, Join operation with different selectivities, and high cardinality aggregation.