Motivation

Compiled System
+ reduces function call overhead
+ reduces interpretation overhead
+ good for OLAP queries
— high cost for short running OLTP queries

Interpreted System
+ easy to maintain across platforms
+ does not have compilation cost
+ good for short running queries
— requires creation of intermediate results

Idea

Proposed Hybrid System
+ combines interpretation with compilation
+ avoids compilation cost by caching/reusing compiled code

Experimental Results

select * from R where R.a < max1 && R.b < max2 && R.c < max3

Type of data points: integers. Tuple sizes: 8 bytes.
Experiments have been conducted on a 4-way Intel Xeon E7-4820 with 256GB main-memory per CPU.