

What Makes Fatworm in Java a Terrible Idea

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Outline

- 1 Motivating Example
- 2 Analysis
- 3 Conclusion

Examples

Here I'm going to demonstrate how a simple change of coding style leads to 16x performance gain, which could easily overwhelm many more general optimizations on Logic Plan.

Example 1.

Evaluating binary expressions.

Example 2.

Product list faster than binary product?

What leads to such huge difference

Besides alias, the source of all other evils: Java and JVM.

- Object is slow
- Method call/recursion is slow(no tail call optimization)
- Speed of evaluating binary expressions(wrapping and unwrapping of String/Decimal)

Conclusion

- Had there been no alias, there would be no more wars.
- Java didn't guarantee a natural but efficient way to write the code.
- If you have to tackle the details yourselves why bother Java, we already have C/C++.