

Don't Repeat Yourself

How to code better

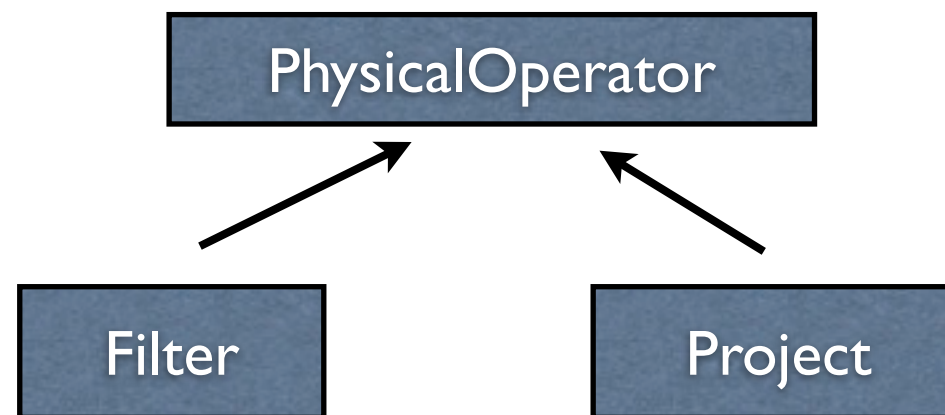
- Good: Don't Repeat Yourself
- Bad: Copy & Paste

Don't repeat yourself

- Every piece of knowledge must have a single, unambiguous, authoritative representation within a system.
- Single Source of Truth
 - http://en.wikipedia.org/wiki/Single_Source_of_Truth
 - http://en.wikipedia.org/wiki/Don't_repeat_yourself

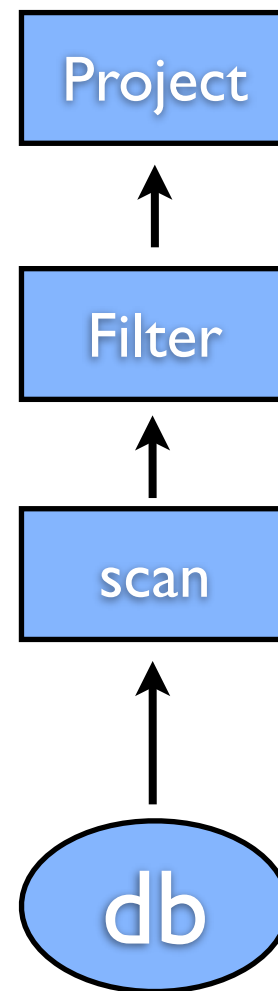
- **DON'T COPY & PASTE!**

Example I



Example I

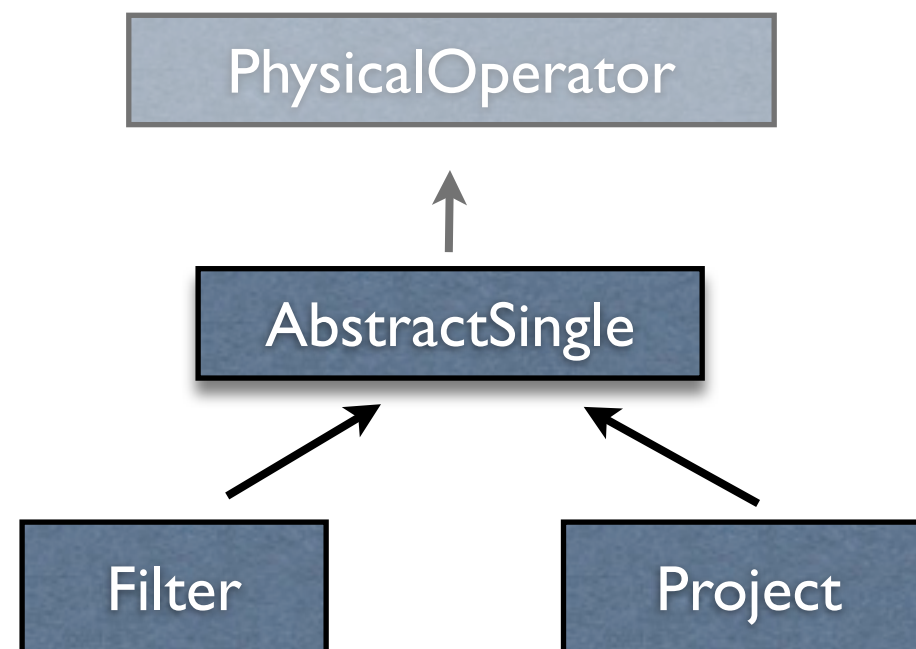
- Project.child
- Filter.child



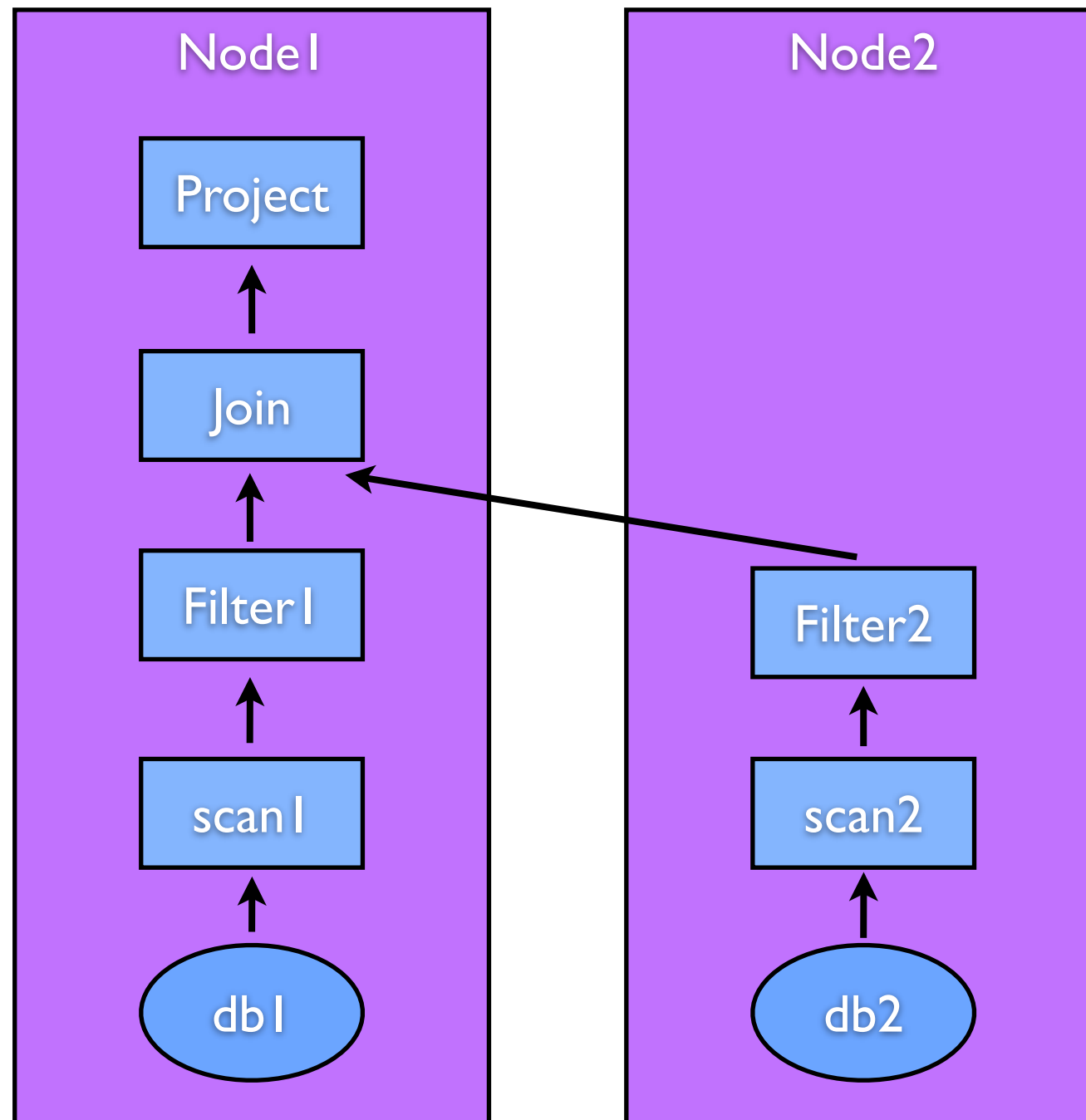
Example I

- Single Source of Truth: Every piece of knowledge must have a single, unambiguous, authoritative representation within a system.
 - Project.child
 - Filter.child

Example I



Example 2



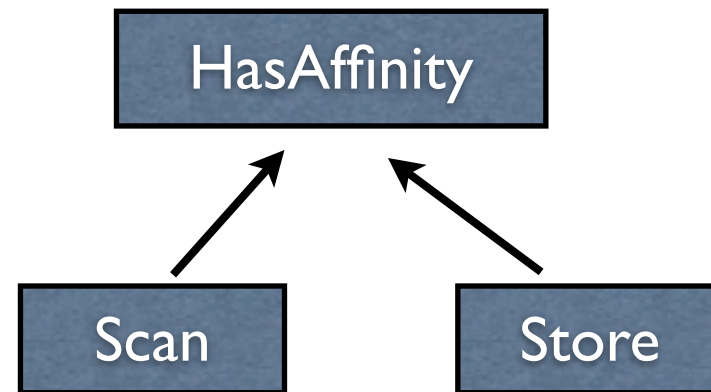
Example 2

- Some physical operator that has affinity to particular nodes.
- Scan: Affinity information with nodes
- Store: Affinity information with nodes

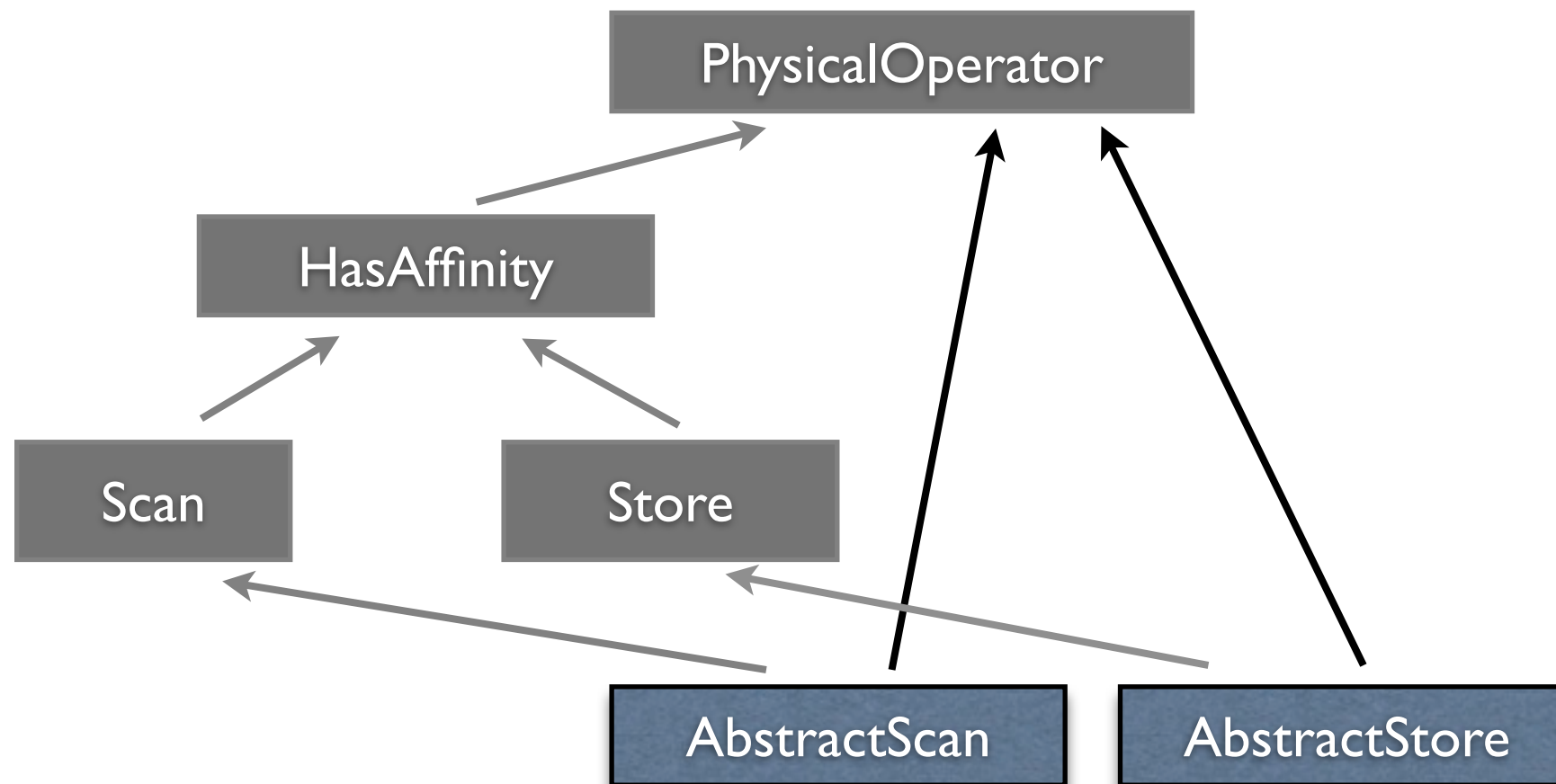
Example 2

- Single Source of Truth: Every piece of knowledge must have a single, unambiguous, authoritative representation within a system.
- Scan: Affinity information with nodes
- Store: Affinity information with nodes

Example 2



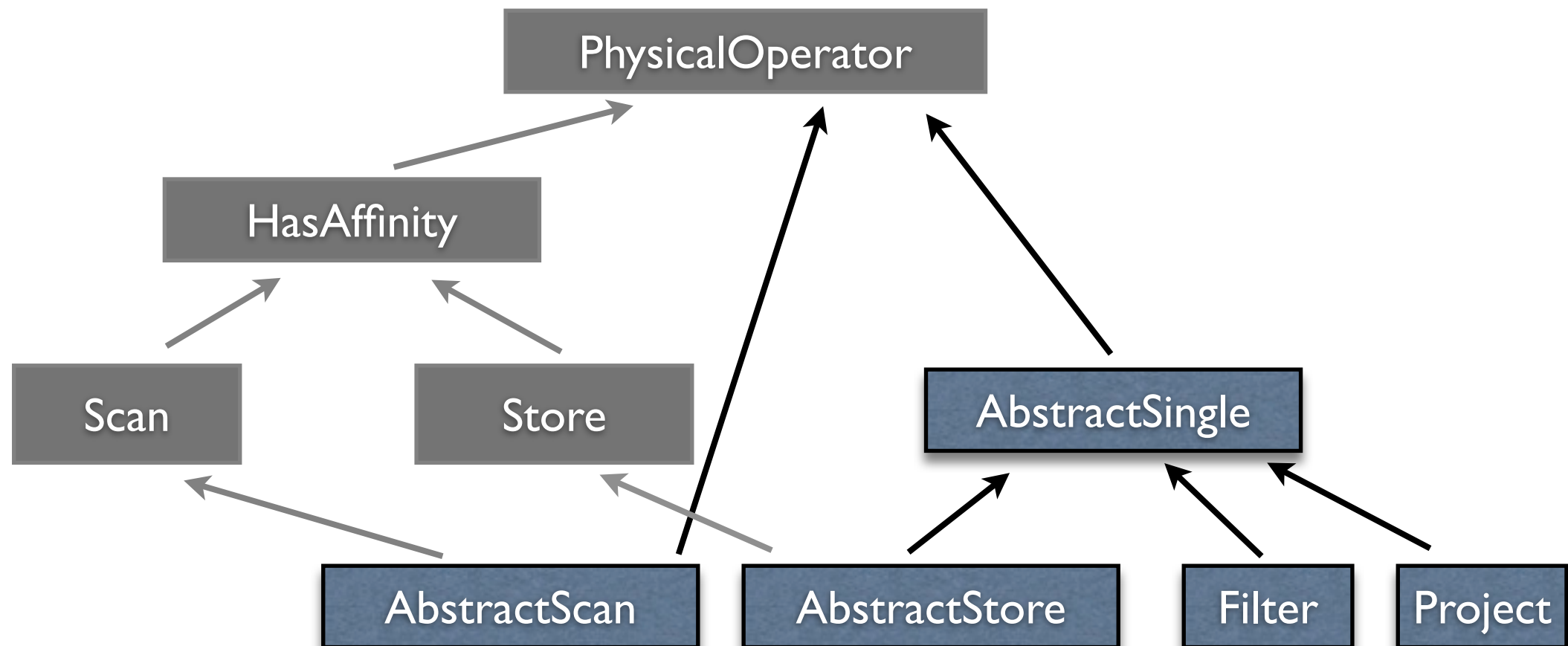
Example 2



Example 2

- Questions
 - Why “multiple inherent”?
 - Why interface Store, class Filter?
 - Why no AbstractHasAffinity?

Example 2



Example 3

LogicalOperator

PhysicalOperator

Example 3

- LogicalOperator & PhysicalOperator
- DAG
 - LogicalOperator:LogicalPlan
 - PhysicalOperator:PhysicalPlan

Example 3

- Single Source of Truth: Every piece of knowledge must have a single, unambiguous, authoritative representation within a system.
- LogicalOperator:LogicalPlan
- PhysicalOperator:PhysicalPlan

Example 3

Graph

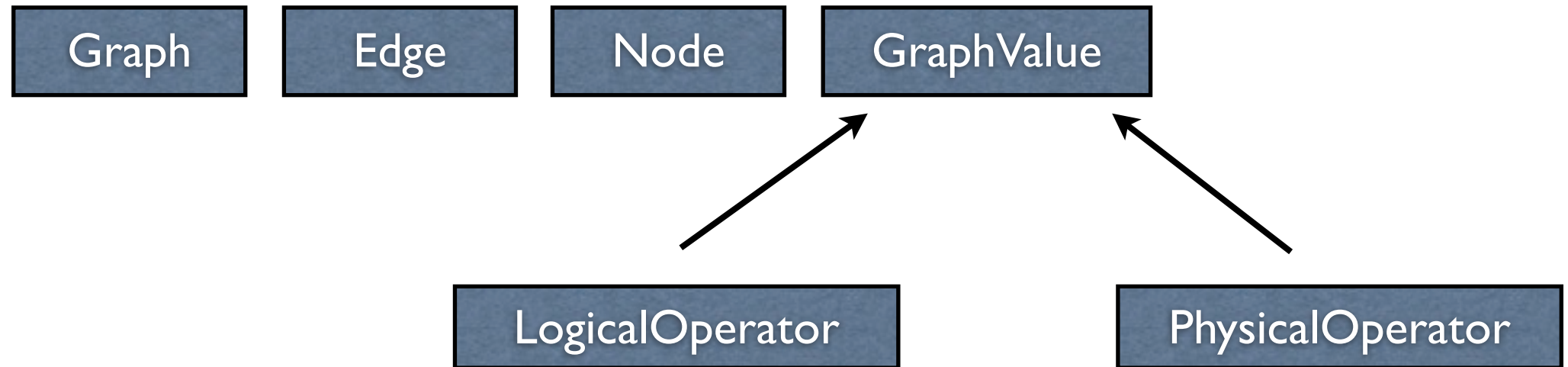
Edge

Node

GraphValue

- DAG

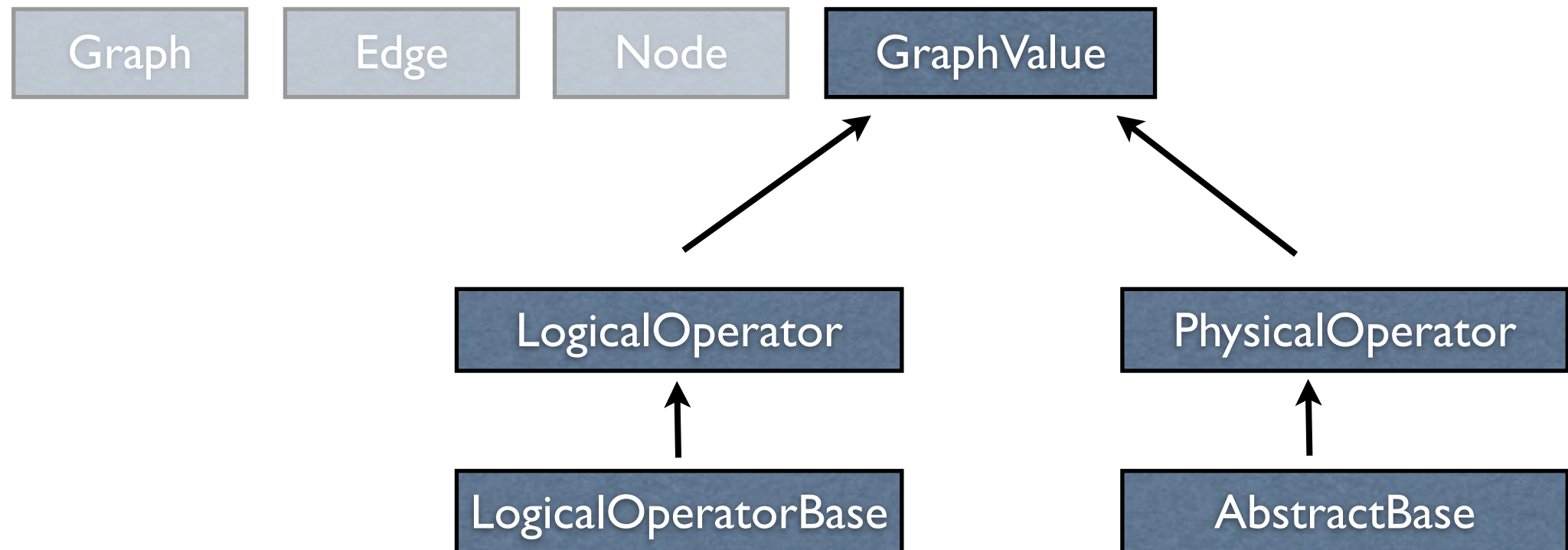
Example 3



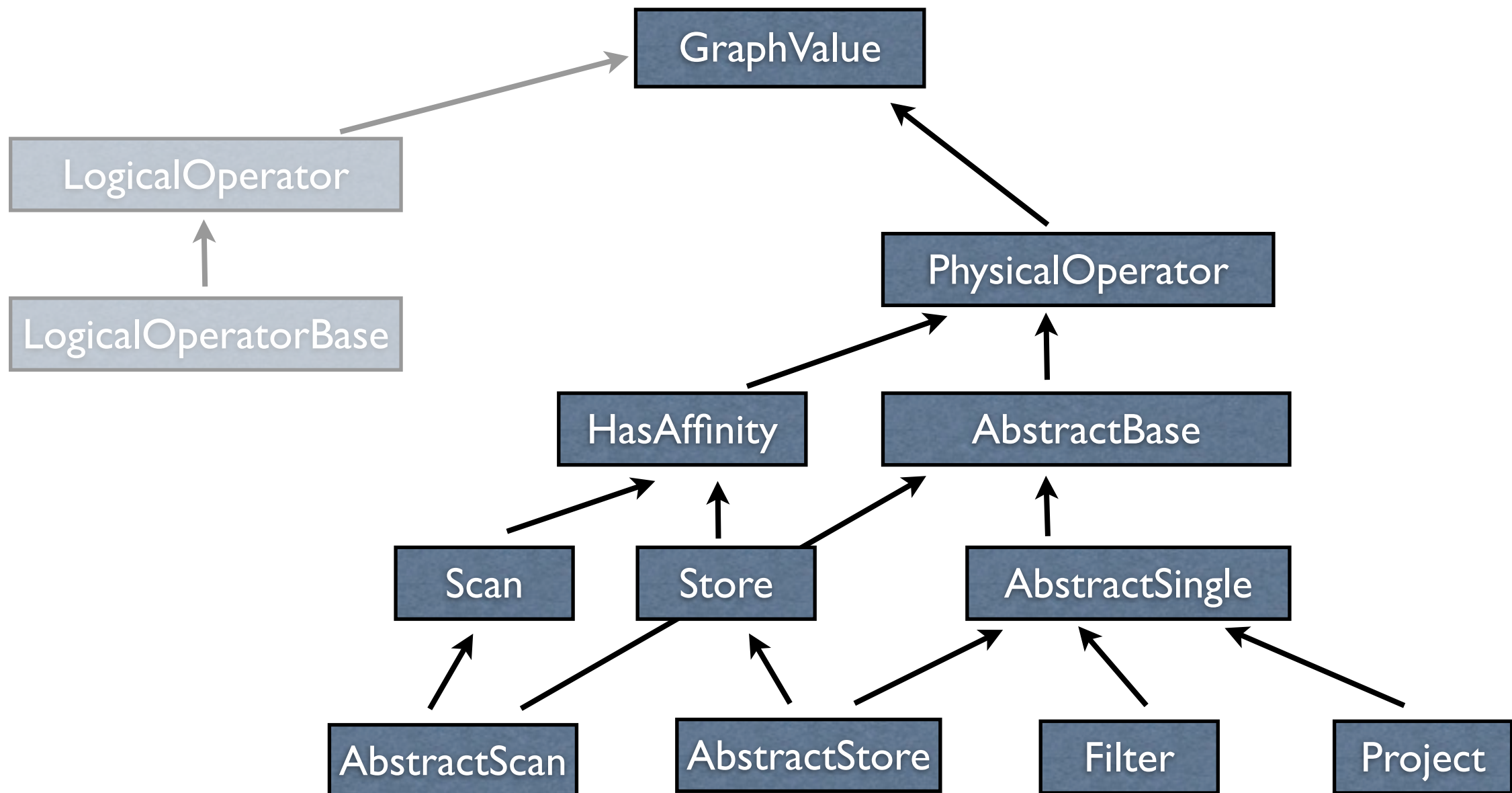
Example 3

- Traverse in DAG
 - DP: Visitor
 - GraphVisitor
 - enter()
 - visit()
 - leave()
 - GraphValue
 - visit(GraphVisitor visitor)

Example 3



Example 3



Example 4

- Method Reuse
 - `org.apache.drill.exec.planner.PhysicalPlanReader`
 - `org.apache.drill.common.util.PathScanner`
 - `java.lang.String`

Example 5

- `org.apache.drill.exec.planner.PhysicalPlanReader`