## Chapter 5.5 Introduction of Plan Selection Based on Cost

***Introduction:***

No matter choose the Logical Query Plan or construct the Physical Plan from the Logical Query Plan, the Query Optimizer needs to estimate the cost of the specific Expression.

Just like before, we use Executable Disk I/O to make estimation about the cost of Expression. However, Disk I/O influenced by factors below:

* Select the Realization Operator for Specific Logic Operator, this is what we choose when we choose the Logic Query Plan.
* The Size of Intermediate Relation.
* The Physical Operator that is used to Realize Logic Operator.
* Sort the Similar Operators.
* The Parameters that Passed from Physical Operator to the next Physical Operator.

Here, in order to make Plan effect, we need to solve many questions.

### Chapter 5.5.1 Get Estimation of Size Parameter

### Chapter 5.5.2 Calculation of Statistical Value

### Chapter 5.5.3 Heuristic Estimation of Decreasing Logical Query Plan

### Chapter 5.5.4 The Method to Enumerate Physical Project