Database Management Systems

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Detailed reading

- From the book **Database systems the complete book**
- https://bit.ly/2UTjzMU
- In chapter 16 we will read first four important sections
- These are section 16.1 Parsing
- Section 16.2 Algebraic laws for improving query plans
- Section 16.3 From parse tree to logical query plan
- Section 16.4 Estimating the cost of operations

Section 16.1

- From the book **Database systems the complete book**
- https://bit.ly/2UTjzMU
- Section 16.1 Parsing discusses grammar for SQL
- If you have difficulty understanding the given contents, please read the section 5.2.8, page 201, example 5.10 where expression tree example is given
- Then visit the grammar rules presented in this section.
- Note the difference between parse tree and the expression tree.
- Given an SQL query such as figure 16.4, the grammar rule Select-From-Where (SWF) is used to build a parse tree corresponding to this SQL query as given in figure 16.5.
- In case you still have difficulty understanding parse tree you may proceed to section 16.2

Algebraic laws to improve query plan

- From the book **Database systems the complete book**
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- This is a very easy section to follow
- It discusses commutative and associative properties of operators
- These properties are used to modify the expression (parse) tree
- Read all the examples present from 16.3 to 16.14.