* Why is this query running slow?
* Is my index getting used?
* Why does this query run faster than this query?

<https://www.youtube.com/watch?v=J69zLvoh2oI>

Execution Plan: (It is graphical execution plan or row wise or XML)

An Execution Plan shows how SQL Server executed the query or solved problem. Ex: Select \* from Employee e inner join Department d on e.deptid= d.deptid. So in this query whether employee selected first or department selected first then what happens etc… will be explained in Execution Plan.

Set showplan\_all on🡪 to show the plan in rows

Set showplan\_xml on🡪 to show the plan in xml

Steps to do it:

1. Write Query
2. GoTo Querty Tab 🡪 select
   1. Display Estimated execution plan
   2. Include Actual execution plan.
3. Type 2 Queries and run execution plan at the sametime. It will show 2 GUI explaining execution plan for each of queries.

Result of Execution Plan gives

1. It will give query cost.
2. What can be done to improve performance. Ex: Missing Index(Impact 72%). Create Non-Clustered index.
3. GUI plans are read from right to left.

An execution plan is the result of the **query optimizer's**attempt to calculate the most efficient way to imple­ment the request represented by the T-SQL query you sub­mitted.

Execution plans can tell you how a query will be executed, or how a query was executed.

They are, therefore, the DBA's primary means of troubleshooting a poorly performing query.