

Table Scan

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graph LR; A[Table Scan] --- B[When?]; A --- C[how table scan work?]; B --- D[1. Table dose not has any indexes in general]; B --- E[2. Table can has some indexes , but all columns in the where condition does not have any index]; B --- F[ex : product table has index on id column but has not on name column]; B --- G[select * from product where name = 'apple' --> table scan]; C --- H[1. read and load all pages or rows for this table from disk to memory]; C --- I[2. loop on all rows on database server memory]; C --- J[3. filter the rows by where conditions and return only the rows which meet the conditions to client.];
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When ?

1. Table dose not has any indexes in general
 2. Table can has some indexes , but all columns in the where condition does not have any index
- ex : product table has index on id column but has not on name column
- select * from product where name = 'apple' --> table scan

how table scan work ?

1. read and load all pages or rows for this table from disk to memory
2. loop on all rows on database server memory
3. filter the rows by where conditions and return only the rows which meet the conditions to client.