Aggregate Functions and Update

https://www.amazon.com/Information-Rules-Strategic-Network-Economy/dp/087584863X

https://www.amazon.com/Platform-Revolution-Networked-Markets-Transforming/dp/0393354350/ref=pd_lpo_sbs_14_t_0?_encoding=UTF8&psc=1&refRID=SHDKD477XDY7V9VZ4GF4

https://www.reddit.com/r/reddeadredemption/comments/7vuo5t/any_estimates_as_to_the_development_cost_of_red/

One of the most fundamental features of information goods is that their cost of production is dominated by the "first-copy costs." Once the first copy of a book has been printed, the cost of printing another one is only a few dollars. What's more, with recent advances in information technology, the cost of distributing information is falling, causing first-copy costs to comprise an even greater fraction of total costs than they have historically. Information is costly to produce but cheap to reproduce.

In the language of economics, the fixed costs of production are large, but the variable costs of reproduction are small. This cost structure leads to substantial economies of scale: the more you produce, the lower your average cost of production.

Announcement:

In database management an aggregate function is a function where the values of multiple rows are grouped together to form a single value of more significant meaning or measurement.

Basically, these functions have statistical meanings.

Trade-off of aggregation:

You will always need to aggregate data in nowadays' data manipulation. Suppose your boss wants you to write a report, you never directly throw the raw data to your boss. The raw data contains everything with no information loss. However, aggregation simplifies the process that you understand your data.

Consider these two sentences:

1) The GPA

2) You grades in the past four years in college are respectively: 1. 2. 3. …

Quick Reviews:

Grammar Summary:

SELECT COUNT(*column_name*)
FROM *table_name*
WHERE *condition*;

SELECT AVG(*column_name*)
FROM *table_name*
WHERE *condition*;

SELECT SUM(*column_name*)
FROM *table_name*
WHERE *condition*;

SELECT MIN(*column_name*)
FROM *table_name*
WHERE *condition*;

SELECT MAX(*column_name*)
FROM *table_name*
WHERE *condition*;

Up till now, what we have learn is something like "search" in a table. This manipulation will not change the original table. But sometimes we may need to change the contents in the table. For example, when some record is not correct.

There are four basic manipulations on table: "Insert" (a row), "Delete", "Update", "Search"

1) How to add a column in Access?

2) Update a column

UPDATE *table_name*
SET *column1 = value1*, *column2 = value2*, ...
WHERE *condition*;

Note: Be careful when updating records in a table! Notice the WHERE clause in the UPDATE statement. The WHERE clause specifies which record(s) that should be updated. If you omit the WHERE clause, all records in the table will be updated!

Delete

DELETE FROM *table_name*
WHERE *condition*;

Group by

1 Find the average height of players from university of Connecticut

2 Find the average height of players from each university

      a. Group all the players by their college

      b. calculate the average of the height within each group

3 Find the number of players in each college

select college,count(*) as num from players group by college having count(*)>10 order by count(*) ;

SELECT *column_name(s)*
FROM *table_name*
WHERE *condition*
GROUP BY *column_name(s)*
ORDER BY *column_name(s);*

Announcement:

1) Assignment

1) Clear on Alias, use "num" or num

2) Desc, Asc, which is default?