

View

- Control access to the data set
(Limit access to users to a subset of data)
- Provide only the relevant info (avoids confusion with large data set)
- Derive info from DB and present as data to user.
- Rename columns/tables according to user's familiarity

Update through a view is infeasible in many cases.
It is not recommended to support it.

A view is a definition of a query
where the query generates the subset of data
from the DB.

Create view ^{View/definition name} CustRep

AS

Query SELECT c.CustomerName as CustName, ~~r~~
FROM Customer, r Rep
WHERE c.repNum = r.repNum

Query against view (by using the view as a table)

SELECT CustName

FROM CustRep

— will be replaced by ←

WHERE RepName = ' ---- '

Drop View CustRep

Index

Index expedites retrieval operations.

It slows down insert/update/delete operations.

The index values must be stored in sorted order.

When ~~index~~ a table is updated,

the index entries record no. need to be modified

Index is stored outside the table.

Requires additional storage space.

additional processing for updating
index entries for ~~any~~ changes
to the table.

Create index indexName
on TableName(ColumnName).

Drop index indexName on TableName(ColumnName)

For massive updates,

~~delete~~ drop index

- Perform updates
- Rebuild index

Justification for an index? = $\frac{\text{frequency of retrieval on index}}{\text{frequency of update on Column}}$