**View**

- Control access to the data set
  (limit access to users to a subset of data)
- Provide only the relevant info (avoids confusion with a 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** CustRep

**AS**

**Query**

```sql
SELECT C.CustomerName as CustName, 
R.Firstname + R.Lastname as RepName
FROM Customers, Rep
WHERE C.repNum = R.RepNum
```

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

```sql
SELECT CustName
FROM CustRep
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 an index 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(Column Name).

Drop index indexName on TableName(Column Name).

For massive updates,

\[
\text{delete} \rightarrow \text{drop index} \rightarrow \text{Perform updates} \rightarrow \text{Rebuild index}
\]

Justification for an index? = \( \frac{\text{frequency of retrieval on index}}{\text{frequency of update on column}} \)