



Definitions

Index is a physical object of Data Base. It creates for speeding-up the process of searching desired data into the table. The indexes are recommended to create on the fields that are frequency retrieve and have high selectivity. If the field of the table receives the modification then the creation of index on this field can slow down productiveness of Data Base. That is why try different variation of queries, create indexes and compare plans of query execution with and without indexes.

- The most DBMS create indexes on primary keys of every table.

View is a virtual table. It sets up a selection transparency of data from several tables. In other words **View** is a query that select data from several tables with imposed conditions of selection on joining tables or result set.

- For example, the following View selects the names of employees, their relatives and degree of relationship:

```
CREATE VIEW V_FAMILY (EMPLOYEE, RELATIVE, RELATION) AS
  SELECT E.FIRST_NAME || ' ' || E.LAST_NAME, MF.NAME, MF.MEM_TYPE
  FROM EMPLOYEES E INNER JOIN MEMBERS_FAMILY MF ON MF.EMP_NO = E.EMP_NO;
```

Now we can select data from V_FAMILY as it were a physical table of Data Base.

Stored Procedure is a physical object of Data Base. It solves logically defined task and uses for implementation the set of actions. Stored procedure is not a standard facility of SQL that is why avoid to use it without necessity. Frequency using of stored procedures can adversely affect on duration of waiting of result set generation and efficiency of Data Base. It is more preferred to use queries or VIEWS.