

SQL - INDEX CONSTRAINT

The INDEX is used to create and retrieve data from the database very quickly. Index can be created by using single or group of columns in a table. When index is created it is assigned a ROWID for each rows before it sort out the data.

Proper indexes are good for performance in large databases but you need to be careful while creating index. Selection of fields depends on what you are using in your SQL queries.

Example:

For example, the following SQL creates a new table called CUSTOMERS and adds five columns:

```
CREATE TABLE CUSTOMERS (  
    ID INT NOT NULL,  
    NAME VARCHAR (20) NOT NULL,  
    AGE INT NOT NULL,  
    ADDRESS CHAR (25) ,  
    SALARY DECIMAL (18, 2),  
    PRIMARY KEY (ID)  
);
```

Now you can create index on single or multiple columns using the folloiwng syntax:

```
CREATE INDEX index_name  
ON table_name ( column1, column2.....);
```

To create an INDEX on AGE column, to optimize the search on customers for a particular age, following is the SQL syntax:

```
CREATE INDEX idx_age  
ON CUSTOMERS ( AGE );
```

DROP a INDEX Constraint:

To drop a INDEX constraint, use the following SQL:

```
ALTER TABLE CUSTOMERS  
DROP INDEX idx_age;
```