

① Database: Organized collection of data in a software

- Word
- Excel
- Access
- Oracle
- SQL Server
- MySQL
- Dbase
- Foxpro

* Database Table ②

It is just a structure that contains data and keeps it separated from other columns



* Database fields and records ③

Fields = columns → ↓

Records = rows →

Rolls	Study
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* Oracle: RDBMS software developer

- Support SQL language
- Oracle V2 was the first version

* RDBMS: Relational Database Management System ④

Properties:-

- i) Insert/Update/Delete info based on condition (Date names, marks, etc.)
- ii) Accept SQL Queries

iii) Security

iv) Transactional Control

v) Manage data sharing/access rules

* What is SQL? (Is SQL common for all RDBMS packages, prove it?) True.

SQL - Structured Query language

(Used for interaction with database)

Username: ' / ' as sysdba.

Password: ~~12345678~~

(Creating a table:-

Condition:- Table name can be upto 30 char

name must begin with alphabet

→ Not case sensitive

1. Names can contain a-z, 0-9, \$

2. Names cannot be single/double

3. We create by 'CREATE TABLE' command

(Creating a table:- Cold An

Create table Table Name / Datatype

CREATE TABLE STUDENT (ID NUMBER, NAME VARCHAR2(10), ADDRESS VARCHAR2(50))

To check what we created

DESC STUDENT

To insert the row use INSERT command

INSERT INTO STUDENT VALUES (1, 'OMAR', 'MUMBAI');

To check record :-

SELECT * FROM STUDENT;

↑
All the records.

SELECT ID, NAME FROM STUDENT

If you know only specific

INSERT INTO STUDENT (ID, NAME)
VALUES (3, 'Madi');

To take values from sys.

INSERT INTO STUDENT (SID, SURNAME,
& ADDRESS);

Enter value for ID : 4

" Name : LEO

" address : MONTPELIER

* PRIMARY KEY: ensures
column can't be null or
duplicate.

* Not Null: ensures, can't be
blank.

* Delete table = Drop table student

* Create table student (ID NUMBER

Primary key, Name VARCHAR2(10) NOT
null, Address (10);

* Delete From: command

* Update: command
more condition

Ex. Delete From Student where ID=2

Ex UPDATE STUDENT SET NAME='LEO'
where ID=2;

[ID 2 we name LEO changed]

To see specific

Select Name From Student where Gender =

Connect

Select 'ID' - 'Name' - 'State' From

ID - Name - State → output

To check where there was record.

Select * From Student where State =

Two conditions: and

Select * From Student where
Gender = 'M' and State = 'Biarz'

ORDER BY
Select * From Student
ORDER BY ID DESC

FOR Ascending

Order By ID;

Not display

Select * From Student where ID=4

will not be displayed.

Ex. Delete From Student where ID=2

like 'pattern' (Select everything)

% : Represents any value of any length

One unknown character

Two

New specific data (For ex Name)

> Select * From students where
name like 'R%';

> Select * From students where
name like '%hi%';

> Select * From students where
name like '_O%';

↑
Only one character
before

* In Operator (OR)

(MGR, STAFF)

Select * From EMP DESIGN

* Between Operator
Between: Selects records from
a specific range

Select * From student where
ID Between 2 and 5;
OR

Select * From student where
ID >= 2 and ID <= 5;

For selecting for dates
Select * From students where
DOB Between '05-JUN-2012' and
'10 JUL-2012'

* Pseudo-columns:

Behaves like table column, but
you cannot insert, update, or delete
their values

SYSDATE = current date and time

SYSTIMESTAMP: Complete time with AM/PM

RowNum = Sequence number assigned to
retrieved row

RowID: Unique identifier for a row

UID: number associated with user

USER: user of current SQL

CURVAL: current value

NextVal: next value

> Select sysdate, systimestamp from
dual

> Select uid, user from dual;

CURVAL and NextVal

Step 1: Create sequence

CREATE SEQUENCE id_seq

MINVALUE 1

MAXVALUE 9999

START WITH 1

INCREMENT BY 1

CACHE 20;

↑
specifies how many sequence
values will be stored in memory

> Create table TBI (ID NUMBER, Name VARCHAR2(100))

> Insert into TBI values (ID_SEQ.NEXTVAL,
'RAGI')

↓

SHARAN

Current Val : To use same value
for next

ex

Insert into TB1 (col1, col2, col3, col4)
ABC

3 ABC

3 ABC

UPDATE:

To change a single unit

Update tablename roll-no=2
where name='patel';

Two values to change together
~~insert into~~

Update tablename name='patel',
address='mumbai' where roll-no=1