

Data: Details of entity. → input raw material.

Entity means anything in this real world.

information → output.

DBMS:

Database Management system is computerized record keeping system which manage and retrieve data efficiently and effectively.

SQL (Structure query language)

1. DDL (Data Definition language)

→ create, alter, drop, truncate

2. DML (Data Manipulation language)

→ insert, update, delete

3. DQL (Data Query language)

→ extract, retrieve

4. TCL (Transaction control language)

→ commit, rollback, savepoint

Number(S,P)

Number(P,S) = P = Precision

S = SCALE

char(10) Fixed length Data type

Varchar/Varchar2 Variable length Data types:

Name char(10)

Name Varchar(10)

char VS Varchar/Varchar2

→ Fast searching → Slow searching

→ Memory consuming is high → Memory consuming is low.

→ you can store around 256 characters → in Varchar you can store 2000 characters

and in Varchar2

you can store 4000 Characters



Syntax for creating table.

create table table\_name (attributes in comma  
separate list);

ex:

```
create table friends (s number(2),  
                    Name char(25),  
                    contact number(10),  
                    city char(10));
```

Syntax for Inserting data into table.

There are two ways to insert  
Data into table.

1. Syntax.

```
Insert into friends values (1, 'Vijay', 6352123890,  
                           'Deesa');
```

2. Second way / with second way you can  
accept values from the user.

```
Insert into friends values (&s, '&name', &contact, &city);
```

you can use Run or / to  
execute previous statement again.

Syntax to Select Particular Field / attribute

Select Field1, Field2. from Table-name;

ex

Select Name, city from friends.

To apply condition

ex

Select Name, city from student friends  
where city = 'Patan';

- If you write

where city = 'Patan' and city = 'Deesa';

⇒ No Rows Selected.

"city of a person can't be two"

= If you write

where city = 'Patan' <sup>or</sup> and city = 'deesa';

It will show the both records  
connected to city Patan <sup>and</sup> / ~~or~~ deesa.



we can also write

where city In('Patun', 'Deesa');

To Negate the statement.

①

where city Not In('Patun', 'Deesa');

It will show the Records Not related to city Patun and Deesa.

②

where city Not (city = 'Patun' or city = 'Deesa');

③

where <> not equal to

where city <> 'Patun' and city <> 'Deesa';

order / Show the table by Ascending or Descending order.

Select \* from friends order by name;

=> by default the order is Ascending.

Select Name, city from friends order by asc;

for descending order

Select Name, city from friends order by desc;

To update the Record

update friends set name='dhaavi';  
it's wrong way to update because  
it will set all names to "dhaavi".

The correct method is

update friends set name='dhaavi' where sr=2;  
you should give where query / condition  
so that it would not effect other elements / Data.

after making changes you should give  
command commit so it will save your  
records

=> Note! DDL Statments are committed  
by Default so before using  
DDL Statments you should  
check and the Date.

it means it will commit all  
your previous data when you give DDL  
statments like create, alter drop, truncate



To drop the table use

- `drop table table-name;`

### Syntax of Alter

If you want to add one extra another column in table then.

`Alter table table-name Add (field name Type);`

ex

`Alter table student Add (email varchar(50));`

If you want to remove column from the table

`Alter table table-name drop column column-name;`

ex

`Alter table student drop column email;`



Date: \_\_\_\_\_  
Page: \_\_\_\_\_

If you want to modify the column  
data type

Alter table table-name modify (field name Type)

ex

Alter table student modify (name varchar(50));

If you want to Rename <sup>Table</sup> column field name

Alter table table-name Rename column oldname  
To newname;

ex

Alter table

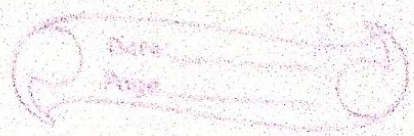
If you want to Rename column field  
name

Alter table table-name Rename column oldname  
To newname

ex

Alter table student Rename column name To  
stud-name;





If you want to Rename the table name.

Rename 'old name' To 'newname';

ex

Rename student To student2;

If you want to drop/delete table.

Drop  
Alter table tablename;

ex

Drop table student;

If you want to Drop column  
of the table.

Alter table table-name Drop column column name;

ex

Alter table student Drop column email;



Syntax for update

If you want to update table

update table-name Set field name = value  
where condition;

ex

update student Set city = 'Deesa'  
where pin = 385535;

If you want to Delete any Row/ Rows

Delete from table name where condition;

ex

Delete from student where Name = 'Dhavi' <sup>And</sup>  
Roll No = 8;

Savepoint

Insert ---

update ---

Savepoint S1;

Insert ---

Insert ---

Savepoint S2;

} Rollback to S2;

} Rollback to S1;

} Rollback;