Database - Organised collection of data.

Recommended books
- SQL - Evan Bayross
- SQL tutorial - W3C School
- ANSI SQL - Martin Grubbel

DDL - Data definition language
DML - Data manipulation language
DQL - Data query language
DCL - Data control language

DDL - Create, alter, remove data from table
(drop)

$\Big[$ number (total, precision) = (3,3)
number (6,3) for float

Student (roll, sname, dept, ~~sotl~~ dob)

create table student (roll number(3), primary key, → 256 bytes
sname ~~va~~ char(20), not null char(20) → 1024 bytes
dept varchar2(10), varchar (23)
varchar2 (20)
→ 2kB
check dept like ('c%'),   dob date);
'%c', '%c%'   , primary key (roll)); Just preferred
at the end

- Fixed length record - Memory used is fixed, no matter the length of record.
- Variable length record - Memory space is not wasted, only required
size is used.
∴ format is a problem

* Oracle date type format :   16-Jan-18
(1932-2033) range is specified.

* SQL is not case-sensitive, but data is case-sensitive.

> create table student (roll number (3) primary key,
sname varchar2(20), dept varchar2(10) not null,
dob date, doj date, check dept like ('c%'),
check (doj > dob));
* When comparing two records, always put the check after all declarations

<u>Wildcards</u>   _ c %

single   any no of char
char

> alter table student (add primary key (roll), modify roll (4));

> drop student;

DML

> insert into student values (1, 'AB', 'cse', '16-Jan-18'));

> insert into student values (&&, '&s', '&d', '&da') ;

> roll:
  sname: } prompt for input after using variable
  :

SQL > / ↵   → to

DCL

> commit   → to save permanently

ORACLE
EXPRESS

DML

> ~~delete~~ from student ;
> delete ~~remove~~ from student where roll = 18 ;
> update student set roll

DQL

> select * from student;   → select within a table.
> select roll, dept from student where ___ ;
> select * from tab ; → select from different tables
> desc student ;   → describe table

• .ocl, .ora files → highly encrypted files.

username : cse @ orcl. clserver. org
pass : cse   host string ⌐→ not asked in
                                  later versions like 11g

number (10, 2) → floating

<u>for foreign key</u>

references client-master (client_no)
references master-table (master_column)