



Oracle Class II

Overview of select , insert , update , delete

Contains class II assignments

SELECT

SELECT

[DISTINCT | UNIQUE] (*, columnname [AS alias], ...)

FROM

tablename

[WHERE condition]

[GROUP BY group_by_expression]

[HAVING group_condition]

[ORDER BY columnname];

Select Contd ...

- ☐ Selecting all columns using *
- ☐ Selecting some of the columns -> Projection
- ☐ Alias names if contains space or special symbol , then it needs to be put in double quotes
- ☐ Distinct and unique can be used to remove duplicates
- ☐ comparison operators =; != or <>; <; >; <=, => are allowed in the conditions of a where clause.
- ☐ One useful query to get the number of queries is count(*)
- ☐ Order by , by default gives result in ascending order
- ☐ For string type of data like can be used.
- ☐ || is used as a concatenation operator for strings and string literal is to be enclosed within single quotes.

Select Contd ...

- ❑ Multiple conditions can be concatenated using and or etc
- ❑ for range queries we can use between and .

Example : Select emailto, email from email where size between 10 and 20;

- ❑ IN for multiple values

Select city, population from citydetails where city in ('kol','mum','del','chn');
Similarly not in can be used

- ❑ Like to be used for pattern matching 'a%', '%a%' and '%a'
- ❑ An input value can be taken from the user , using and &

select * from dept where deptno=&no;

Case sensitivity, whitespace, terminators

- SQL commands have the same meaning whether used with uppercase or lowercase characters
- various SQL elements, or "words", must be separated by whitespace (usually a "space" character), the use of extra spaces, tabs, and end-of-line character has little effect on the syntactical correctness of the statement.
- In Oracle SQL, two statement terminators can be used; the semicolon (;) and the forward slash (/). The two are similar in their use, the main difference being that the forward slash can only be used on a separate line.
- Aliasing:

```
select dname as "Departmentname" , loc as "Location" from dept;
```

Dual, dummy column

- How do we display a string literal for each row of the table ?
 - ✓ select 'abc' as ABC from dept;
 - ✓ select 'greetings from flipkart' as msg from dual;

DUAL is essentially a pseudo-table—it has no real data and is generally used for string manipulation and mathematical computation.

The only column in dual is DUMMY, and the only row value is X.

Select sysdate from dual;

Assignments

- ☐ write query to select all the columns of emp table
- ☐ write query to select only Empname, Ename and Job
- ☐ write query to select unique Jobs
- ☐ write query to select only those employees who are salesman
- ☐ select employee name , grade and salary , in the order of their salary
- ☐ Mgmt is considering a pay raise , however they want to find out , if they give a flat 200\$ increment to all , then what % each person is getting . So in your result display , ename , salary and pctincr
- ☐ Express work experience of each of the employees by using sysdate and hiredate in terms of no of years.

Hints : you would need to use cast

Assignments contd.

☐ select only those employees who are a clerk and a manager. Use all of 'or' condition , 'IN' and 'NOT IN' clause

Comment on the case sensitivity of the string literal within single quote

☐ use emp table and use different columns and string concatenation to display a message like below for each of the employees

Output Example :

JAMES is a CLERK and is working in the company for last 32 Years

☐ use emp table to display only those employees who have joined in the year 80 and 81.

Comment on if between clause is inclusive or exclusive

Assignments contd.

- ☐ Use like statement to display name of the employees which start with 'A'

Write your remarks on use of wildcards with like statement

- ☐ Select those employees , who has joined on or before 31st December 1982 and is either a clerk or having a salary greater than 2500