**DATA QUERY LANGUAGE**

**DATA QUERY LANGUAGE:**

1. Select

Capability of select statement:

1. Projection
2. Selection
3. Joins

**PROJECTION:**

Select \*|{[ distinct] column\_name|expression [alias…],….} from table\_name;

**EX:**

Select ename from emp;

**DISTINCT:**

1. It is used to display the unique value.

**EX:**

SQL> select deptno from emp;

DEPTNO

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20

30

30

20

30

30

10

20

10

30

20

30

20

10

14 rows selected.

SQL> select distinct deptno from emp;

DEPTNO

----------

30

20

10

**EXPRESSION:**

It is used to perform some specific operation.

**EX:**

SQL> select 1+4 from emp;

1+4

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5

5

5

5

5

5

5

5

5

5

5

5

5

5

14 rows selected.

**DUAL:**

1. Dual is a dummy table where you can perform independent calculation.
2. It has one column and one row.

**EX:**

SQL> select 1+4 from dual;

1+4

----------

5

**LITERALS:**

1. Literals are the value used in select statements.
2. It can be number, character, and date.
3. For character and date literal it should be enclosed by single quotes.

SQL> select qsp from dual;

select qsp from dual

\*

ERROR at line 1:

ORA-00904: "QSP": invalid identifier

SQL> select 'Mahe' as MAHE from dual;

MAHE

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Mahe

**Structure of dual:**

SQL> desc dual;

Name Null? Type

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DUMMY VARCHAR2(1)

SQL> select \* from dual;

D

-

X

**EX:**

SQL> select ename from emp;

ENAME

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SMITH

ALLEN

WARD

JONES

MARTIN

BLAKE

CLARK

SCOTT

KING

TURNER

ADAMS

JAMES

FORD

MILLER

14 rows selected.

EX 1:

SQL> select 'ename' from emp;

'ENAM

-----

ename

ename

ename

ename

ename

ename

ename

ename

ename

ename

ename

ename

ename

ename

14 rows selected.

**EX 2:**

SQL> select 'mahe' as mahe from dual;

MAHE

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Mahe

**ALIAS:**

1. Alias is the alternative name given to the column name
2. Alias name should mention next to the column name
3. Between column name and alias name we can use as keyword. Using as keyword is not mandatory.
4. Alias is mainly use for calculation.
5. If they are using any special character or spaces in alias name then it should be enclosed with double quotes.
6. In alias underscore can be consider as a character and hence we won’t get any error.

**Concatenation Operator:**

1. Concatenates columns or character strings to other columns
2. Is represented by two vertical bars (||)

**EX:**

SQL> Select ename||job||sal from emp;

**Selection:**

1. Selection is used to select the rows or records.

Syntax:

Select \*/{[ distinct] column\_name/expression [alias…]} from table\_name where<conditions>;

**Ex:**

select ename from emp;