# natural join

#### joins – natural join

The NATURAL JOIN is such a join that performs the same task as an INNER JOIN.

SELECT  $A_1$ ,  $A_2$ ,  $A_3$ , . . . FROM  $r_1$  NATURAL [INNER] JOIN  $r_2$  NATURAL [INNER] JOIN  $r_3$  . . .

- SELECT \* FROM emp NATURAL JOIN dept;
- The associated tables have one or more pairs of identically column-names.
- The columns must be of the same name.
- The columns datatype may differ.
- Don't use ON / USING clause in a NATURAL JOIN.
- When this join condition gets applied always the duplicates of the common columns get eliminated from the result.

A NATURAL JOIN can be used with a LEFT OUTER join, or a RIGHT OUTER join.

If the column-names are not same, then NATURAL JOIN will work as CROSS JOIN.



# simple join

TODO

#### joins – simple join

The SIMPLE JOIN is such a join that performs the same task as an INNER JOIN.

SELECT 
$$A_1$$
,  $A_2$ ,  $A_3$ , ... FROM  $r_1$  SIMPLE JOIN  $r_2$  USING  $(A_1, ...)$ 

SELECT \* FROM emp SIMPLE JOIN dept USING(deptno)

### outer joins

In an outer join, along with rows that satisfy the matching criteria, we also include some or all rows that do not match the criteria.