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| REVISION HISTORY | | | | | |
| Ver. | Description of Change | Author | Date | Approved | |
| Name | Effective Date |
| 1.0 | Initial status | [Kiryl Bucha](mailto:Kiryl_Bucha@epam.com) | 12-JAN-2012 |  |  |
| 2.0 | Updated in accordance with renewed content | [Elias Nema](mailto:Elias_Nema@epam.com) | 20-JAN-2014 |  |  |

Contents

[1. Join Methods 3](#_Toc443491697)

[1.1. Task 2: Nested Loop Join 3](#_Toc443491698)

[1.2. Task 3: Sort-Merge Join 3](#_Toc443491699)

[1.3. Task 4: Hash Join 3](#_Toc443491700)

[1.4. Task 5: Cartesian Join 3](#_Toc443491701)

[1.5. Task 6: Left/Right Outer Joins 3](#_Toc443491702)

[1.6. Task 7: Full Outer Join 3](#_Toc443491703)

[1.7. Task 8: Results 3](#_Toc443491704)

# Join Methods

The main task is to try to get different types of different join methods. You can create your own needed objects, or use existing (in sample schemas). If you are creating tables or indexes, please, attach a script.

## Task 2: Nested Loop Join

Example:

SELECT \*

FROM scott.emp e, scott.dept d

WHERE e.deptno = d.deptno

AND d.deptno = 10

**Note:** You can instruct optimized to use nested loop with the hint: USE\_NL.

## Task 3: Sort-Merge Join

**Note:** You can instruct optimized to use sort-merge join with the hint: USE\_MERGE.

## Task 4: Hash Join

**Note:** You can instruct optimized to use hash join with the hint: USE\_HASH.

## Task 5: Cartesian Join

Implement Cartesian join with:

* ORDERED hint and wrong predicate order.
* W/o join conditions.

## Task 6: Left/Right Outer Joins

Implement Left/Right outer joins with:

* ANSI syntax (left/right join)
* Oracle syntax (+)

## Task 7: Full Outer Join

Implement outer join with:

* ANSI syntax (outer join)
* Oracle syntax (+)

## Task 8: Results

* Screenshots, SQLs, descriptions for Tasks 2-7.
* Make a list of combination of different tables (see examples below) and write a description for the join between them. Express your opinion on why the selected join type was chosen by an optimizer. Create at least 10 variants.

|  |  |  |
| --- | --- | --- |
| Table “A” | Table “B” | Join type description |
| Small Table w/o index on join field | Small Table w/ index on join field |  |
| Small Table w/o index on join field | IOT |  |
| Medium table … |  |  |