- /*+SWAP_JOIN_INPUTS */: 해시조인의 경우, BUILD INPUT를 명시적으로 선택

EX: /*+ SWAP_JOIN_INPUTS(A)*/

--해시조인의경우 BUILD INPUT과 PROBE에 대한 순서를 정할 수 있다.

첫 번째 알고리즘

```
select /*+ leading(r, c, l, d, e)
           use_hash(c) use_hash(l) use_hash(d) use_hash(e) */
       e.first_name, e.last_name, d.department_name
     , l.street_address, l.city, c.country_name, r.region_name
from   hr.regions r
     , hr.countries c
     , hr.locations l
     , hr.departments d
     , hr.employees e
where  d.department_id = e.department_id
and    l.location_id = d.location_id
and    c.country_id = l.country_id
and    r.region_id = c.region_id;

-------------------------------------------------------------------------------------------
 Id  | Operation             | Name             | Rows  | Bytes | Cost (%CPU)| Time     |
-------------------------------------------------------------------------------------------
   0 | SELECT STATEMENT      |                  |   106 | 10706 |    15  (14)| 00:00:01 |
*  1 |  HASH JOIN            |                  |   106 | 10706 |    15  (14)| 00:00:01 |
*  2 |   HASH JOIN           |                  |    27 |  2241 |    12  (17)| 00:00:01 |
*  3 |    HASH JOIN          |                  |    23 |  1472 |     8  (13)| 00:00:01 |
*  4 |     HASH JOIN         |                  |    25 |   700 |     5  (20)| 00:00:01 |
   5 |      TABLE ACCESS FULL| REGIONS          |     4 |    56 |     3   (0)| 00:00:01 |
   6 |      INDEX FULL SCAN  | COUNTRY_C_ID_PK  |    25 |   350 |     1   (0)| 00:00:01 |
   7 |     TABLE ACCESS FULL | LOCATIONS        |    23 |   828 |     3   (0)| 00:00:01 |
   8 |    TABLE ACCESS FULL  | DEPARTMENTS      |    27 |   513 |     3   (0)| 00:00:01 |
   9 |   TABLE ACCESS FULL   | EMPLOYEES        |   107 |  1926 |     3   (0)| 00:00:01 |
-------------------------------------------------------------------------------------------
```

두 번째 알고리즘

```
select /*+ leading(r, c, l, d, e)
           use_hash(c) use_hash(l) use_hash(d) use_hash(e)
           swap_join_inputs(l)
           swap_join_inputs(d)
           swap_join_inputs(e) */
       e.first_name, e.last_name, d.department_name
     , l.street_address, l.city, c.country_name, r.region_name
from   hr.regions r
     , hr.countries c
     , hr.locations l
     , hr.departments d
     , hr.employees e
where  d.department_id = e.department_id
and    l.location_id = d.location_id
and    c.country_id = l.country_id
and    r.region_id = c.region_id;

-------------------------------------------------------------------------------------------
| Id  | Operation             | Name            | Rows  | Bytes | Cost (%CPU)| Time     |
-------------------------------------------------------------------------------------------
|   0 | SELECT STATEMENT      |                 |   106 | 10706 |    15  (14)| 00:00:01 |
|*  1 |  HASH JOIN            |                 |   106 | 10706 |    15  (14)| 00:00:01 |
|   2 |   TABLE ACCESS FULL   | EMPLOYEES       |   107 |  1926 |     3   (0)| 00:00:01 |
|*  3 |   HASH JOIN           |                 |    27 |  2241 |    12  (17)| 00:00:01 |
|   4 |    TABLE ACCESS FULL  | DEPARTMENTS     |    27 |   513 |     3   (0)| 00:00:01 |
|*  5 |    HASH JOIN          |                 |    23 |  1472 |     8  (13)| 00:00:01 |
|   6 |     TABLE ACCESS FULL | LOCATIONS       |    23 |   828 |     3   (0)| 00:00:01 |
|*  7 |     HASH JOIN         |                 |    25 |   700 |     5  (20)| 00:00:01 |
|   8 |      TABLE ACCESS FULL| REGIONS         |     4 |    56 |     3   (0)| 00:00:01 |
|   9 |      INDEX FULL SCAN  | COUNTRY_C_ID_PK |    25 |   350 |     1   (0)| 00:00:01 |
-------------------------------------------------------------------------------------------
```

```
select /*+ leading(d, e, l, c, r)
           use_hash(e) use_hash(l) use_hash(c) use_hash(r)
           swap_join_inputs(l)
           swap_join_inputs(c)
           swap_join_inputs(r) */
       e.first_name, e.last_name, d.department_name
     , l.street_address, l.city, c.country_name, r.region_name
from   hr.regions r
     , hr.countries c
     , hr.locations l
     , hr.departments d
     , hr.employees e
where  d.department_id = e.department_id
and    l.location_id = d.location_id
and    c.country_id = l.country_id
and    r.region_id = c.region_id;

-------------------------------------------------------------------------------------------
| Id  | Operation             | Name            | Rows  | Bytes | Cost (%CPU)| Time     |
-------------------------------------------------------------------------------------------
|   0 | SELECT STATEMENT      |                 |   106 | 10706 |    15  (14)| 00:00:01 |
|*  1 |  HASH JOIN            |                 |   106 | 10706 |    15  (14)| 00:00:01 |
|   2 |   TABLE ACCESS FULL   | REGIONS         |     4 |    56 |     3   (0)| 00:00:01 |
|*  3 |   HASH JOIN           |                 |   106 |  9222 |    12  (17)| 00:00:01 |
|   4 |    INDEX FULL SCAN    | COUNTRY_C_ID_PK |    25 |   350 |     1   (0)| 00:00:01 |
|*  5 |    HASH JOIN          |                 |   106 |  7738 |    10  (10)| 00:00:01 |
|   6 |     TABLE ACCESS FULL | LOCATIONS       |    23 |   828 |     3   (0)| 00:00:01 |
|*  7 |     HASH JOIN         |                 |   106 |  3922 |     7  (15)| 00:00:01 |
|   8 |      TABLE ACCESS FULL| DEPARTMENTS     |    27 |   513 |     3   (0)| 00:00:01 |
|   9 |      TABLE ACCESS FULL| EMPLOYEES       |   107 |  1926 |     3   (0)| 00:00:01 |
-------------------------------------------------------------------------------------------
```