



100 DAYS OF SQL

**Day 4 – Advanced Select with CASE statement and
Correlated subquery**

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Solved “**Binary tree nodes**” question on the HackerRank

Used: MySQL

Question link: <https://www.hackerrank.com/challenges/binary-search-tree-1/problem>

Language: MySQL

 Open in editor

```
1 /*
2 Enter your query here.
3 */
4 select B1.N, (CASE when P is NULL then "Root"
5                 when (select count(*) from BST as B2 where B2.P = B1.N) > 0 then "Inner"
6                 else "Leaf" END) from BST as B1 order by B1.N;
7
```

This is the query I wrote in HackerRank website


Sample input table - BST

<i>N</i>	<i>P</i>
1	2
3	2
6	8
9	8
2	5
8	5
5	<i>null</i>

Sample output

```
1 Leaf
2 Inner
3 Leaf
5 Root
6 Leaf
8 Inner
9 Leaf
```

Output of testcase in Hackerrank

 **Test case 0**

Expected Output

1	1 Leaf
2	2 Inner
3	3 Leaf
4	4 Inner
5	5 Leaf
6	6 Inner
7	7 Leaf
8	8 Leaf
9	9 Inner
10	10 Leaf
11	11 Inner
12	12 Leaf
13	13 Inner