Build All Ski-Slopes

Problem Statement

A ski resort company is planning to construct a new ski slope using a pre-existing network of mountain huts and trails between them. A new slope has to begin at one of the mountain huts, have a middle station at another hut connected with the first one by a direct trail, and end at the third mountain hut which is also connected by a direct trail to the second hut. The altitude of the three huts chosen for constructing the ski slope has to be strictly decreasing.

You are given two SQL tables, mountain_huts and trails, with the following structure:

mountain_huts:

Id	Name	Altitude
1	Dakonat	1900
2	Natisa	2100
3	Gajantut	1600
4	Rifat	782
5	Tupur	1370

trails:

Hut1	Hut2
1	3
3	2
3	5
4	5
1	5

1. Each entry in the table trails represents a direct connection between huts with IDs hut1 and hut2.

2. Create a query that finds all triplets (startpt, middlept, endpt) representing the mountain huts that may be used for construction of a ski slope.

Note:

- All trails are bidirectional and there are no self-trails.
- For two huts there is at most one trail connecting them.
- Output returned by the query can be ordered in any way

Output

startpt	middlept	endpt
Dakonat	Gajantut	Tupur
Dakonat	Tupur	Rifat
Gajantut	Tupur	Rifat
Natisa	Gajantut	Tupur

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