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:

```
create table mountain_huts (
    id integer not null,
    name varchar(40) not null,
    altitude integer not null,
    unique(name),
    unique(id)
);


create table trails (
    hut1 integer not null,
    hut2 integer not null
);


insert into mountain_huts values (1, 'Dakonat', 1900);
insert into mountain_huts values (2, 'Natisa', 2100);
insert into mountain_huts values (3, 'Gajantut', 1600);
insert into mountain_huts values (4, 'Rifat', 782);
insert into mountain_huts values (5, 'Tupur', 1370);

insert into trails values (1, 3);
insert into trails values (3, 2);
insert into trails values (3, 5);
insert into trails values (4, 5);
insert into trails values (1, 5);
```

Each entry in the table trails represents a direct connection between huts with IDs hut1 and hut2. Note that all trails are bidirectional.

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

Output returned by the query can be ordered in any way.

Examples:

1.Given the tables:

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

Your query should return:

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

Assume that:

- there is no trail going from a hut back to itself;
- for every two huts there is at most one direct trail connecting them;
- each hut from table trails occurs in table mountain_huts;