Challenges

Julia asked her students to create some coding challenges. Write a query to print the *hacker_id*, *name*, and the total number of challenges created by each student. Sort your results by the total number of challenges in descending order. If more than one student created the same number of challenges, then sort the result by *hacker_id*. If more than one student created the same number of challenges and the count is less than the maximum number of challenges created, then exclude those students from the result.

Input Format

The following tables contain challenge data:

- *Hackers:* The *hacker_id* is the id of the hacker, and *name* is the name of the hacker.

Column	Type
hacker_id	Integer
name	String

- *Challenges:* The *challenge_id* is the id of the challenge, and *hacker_id* is the id of the student who created the challenge.

Column	Type
challenge_id	Integer
hacker_id	Integer

Sample Input 0

Hackers Table:

hacker_id	name
5077	Rose
21283	Angela
62743	Frank
88255	Patrick
96196	Lisa

Challenges Table:

challenge_id	hacker_id
61654	5077
58302	21283
40587	88255
29477	5077
1220	21283
69514	21283
46561	62743
58077	62743
18483	88255
76766	21283
52382	5077
74467	21283
33625	96196
26053	88255
42665	62743
12859	62743
70094	21283
34599	88255
54680	88255
61881	5077

Sample Output 0

```
21283 Angela 6
88255 Patrick 5
96196 Lisa 1
```

Sample Input 1

Hackers Table:

hacker_id	name
12299	Rose
34856	Angela
79345	Frank
80491	Patrick
81041	Lisa

Challenges Table:

challenge_id	hacker_id
63963	81041
63117	79345
28225	34856
21989	12299
4653	12299
70070	79345
36905	34856
61136	80491
17234	12299
80308	79345
40510	34856
79820	80491
22720	12299
21394	12299
36261	34856
15334	12299
71435	79345
23157	34856
54102	34856
69065	80491

Sample Output 1

```
12299 Rose 6
34856 Angela 6
79345 Frank 4
80491 Patrick 3
81041 Lisa 1
```

Explanation

For *Sample Case 0*, we can get the following details:

hacker_id	name	challenges_created
21283	Angela	6
88255	Patrick	5
5077	Rose	4
62743	Frank	4
96196	Lisa	1

Students 5077 and 62743 both created 4 challenges, but the maximum number of challenges created is 6 so these students are excluded from the result.

For *Sample Case 1*, we can get the following details:

hacker_id	name	challenges_created
12299	Rose	6
34856	Angela	6
79345	Frank	4
80491	Patrick	3
81041	Lisa	1

Students 12299 and 34856 both created 6 challenges. Because 6 is the maximum number of challenges created, these students are included in the result.

```
/* these are the columns we want to output */
select c.hacker_id, h.name ,count(c.hacker_id) as c_count

/* this is the join we want to output them from */
from Hackers as h
   inner join Challenges as c on c.hacker_id = h.hacker_id

/* after they have been grouped by hacker */
group by c.hacker_id, h.name

/* but we want to be selective about which hackers we output */
/* having is required (instead of where) for filtering on groups */
having

/* output anyone with a count that is equal to... */
c_count =
   /* the max count that anyone has */
   (SELECT MAX(temp1.cnt)
   from (SELECT COUNT(hacker_id) as cnt
       from Challenges
       group by hacker_id
       order by hacker_id) temp1)

/* or anyone who's count is in... */
or c_count in
   /* the set of counts... */
   (select t.cnt
    from (select count(*) as cnt
         from challenges
         group by hacker_id) t
    /* who's group of counts... */
    group by t.cnt
    /* has only one element */
    having count(t.cnt) = 1)

/* finally, the order the rows should be output */
order by c_count DESC, c.hacker_id

/* ;) */
;
```