

Email Communication Graph

European Research Institution collected email data from the period October 2003 to May 2005 (18 months). This email data is de-identified by replacing emails with keys/id to maintain privacy. The email message log has all incoming and outgoing email messages of the organization. For each email message in the log the sender and the recipient of the email are recorded.

Task

Write a java program to find the top N popular emails in the email communication graph. A popular email is one that received emails from most people in group.

Input files

The first file is **emails.txt**, which has the list of emails accounts with id.

File format:

First token is the id and next token is the email address which are separated by delimiter ;

```
6;70170@gmail.com
7;19379@gmail.com
8;240737@gmail.com
9;135900@gmail.com
10;227618@gmail.com
11;14506@gmail.com
12;174644@gmail.com
13;237045@gmail.com
```

The second file is **email-logs.txt** has the email message log, which is in the format of from sender id, receiver id.

File format:

The email is sent from id 0 to id 736 and so on...

```
From 0, to 736
From 0, to 3612
From 0, to 4252
From 0, to 16687
From 1, to 1
From 1, to 44
From 1, to 50
```

Expected Output for N = 10

Here is the list of the top 10 popular email address with their incoming emails count.

5155@gmail.com, 7631
171051@gmail.com, 6249
6608@gmail.com, 5949
83086@gmail.com, 4306
18428@gmail.com, 3945
33833@gmail.com, 3092
103291@gmail.com, 2696
20813@gmail.com, 2611
27493@gmail.com, 1849
15133@gmail.com, 1795|