You are given a data dump from one of the servers handling incoming REST API queries. Each server is defined as an interface (ip:port) in the data dump. Each server has 2 interfaces named data1 and data2.

The value field represents the number of incoming queries at a given timestamp.

Please write a JAVA program to do the following.

1. Ingest the attached data from a file

1. Calculate the total average number of queries that each server (data1 and data2 combined) received. Output must be in this form

Instance                               average

10.184.140.1:8802            150

10.184.140.2:8802            200

and so on

1. Calculate the average number of queries that were received on data1 and data2 for all instances. Output must be in this form

Interface             average

Data1                    200

Data2                    300

1. Print the number of spikes each instance (both data1 and data2 inclusive) saw. A spike is defined as any value of 700 and up. Output must be in this form

Instance                               Number of spikes

10.184.140.1:8802            0

10.184.140.2:8802            2

and so on

1. Profile your code. Add timestamps between each step 1 to 4 above and print the time(in any unit you want) it took to output the result. (see if you can do better by reviewing your code). Output must be in this form

Step1                    100ms

Step2                    100ms

and so on