

Roy and Trending Topics

Roy is trying to develop a widget that shows Trending Topics (similar to Facebook) on the home page of HackerEarth Academy. He has gathered a list of **N** Topics (their **IDs**) and their popularity score (say **z-score**) from the database. Now **z-score** change everyday according to the following rules:

1. When a topic is mentioned in a 'Post', its z-score is increased by 50.
2. A 'Like' on such a Post, increases the z-score by 5.
3. A 'Comment' increases z-score by 10.
4. A 'Share' causes an increment of 20.

Now the Trending Topics are decided according to the change in **z-score**. One with the highest increment comes on top and list follows. Roy seeks your help to write an algorithm to find the top **5** Trending Topics.

If change in **z-score** for any two topics is same, then rank them according to their **ID** (one with higher ID gets priority). It is guaranteed that IDs will be unique.

Input Format

First line contains integer **N**

N lines follow, each contains **6** space separated numbers representing Topic **ID**, current z-score - **Z**, Posts - **P**, Likes - **L**, Comments - **C**, Shares - **S**

Constraints:

- $1 \leq N \leq 106$
- $1 \leq ID \leq 109$
- $0 \leq Z, P, L, C, S \leq 109$

Output Format

Print top **5** Topics each in a new line. Each line should contain two space separated integers, Topic **ID** and **new z-score** of the topic.

Sample test

inputcopy

8 1003 100 4 0 0 0 1002 200 6 0 0 0 1001 300 8 0 0 0 1004 100 3 0 0 0 1005 200 3 0 0 0 1006 300 5 0 0 0 1007 100 4 0 0 0 999 100 4 0 0 0

outputcopy

1003 200 1002 300 1001 400 999 200 1007 150

Explanation for sample test

Topic ID	Old z-score	New z-score	Change in z-score
1003	100	200	200-100 = 100
1002	200	300	300-200 = 100
1001	300	400	400-300 = 100
1004	100	150	150-100 = 50
1005	200	150	150-200 = -50
1006	300	250	250-300 = -50
1007	100	150	150-100 = 50
999	100	200	200-100 = 100

Now sort them according to the change in z-score. Change in z-score for IDs 999, 1001, 1002, 1003 is 100, so sort them according to their ID (one with the higher ID gets priority). Similarly proceed further.

After you get the top 5 list of Topic IDs according to the above criteria, find the new z-score from the table for each ID.