The Triathlon Championship

Time Limit: 1s
Memory Limit: 256 MB

Description

Triathlon is an endurance race where athletes have to compete in three sports branch: swimming, cycling, and running. The winner will be determined from the fastest overall completion time. Given the name of **n** athletes competing and their respective completion time on each sport branch, you need to determine the top 3 winner of the competition. In addition, also determine the top 3 fastest from each branch of the sport

Input Format

The first line contains an integer **n**, the number of athletes
Each of the next **n** lines contain **name** and 3 time durations in the format MM:SS. MM is 2 digits minute, SS is 2 digits second, and sss is 3 digits milisecond that corresponds to the completion time of swimming, cycling, and running of each athlete

Output Format

First, print the top 3 winners name of the competition. The winners are determined from the fastest/smallest overall time of swimming + cycling + running time
Then, print the top 3 fastest athlete names of each branch, starting with swimming, cycling, and then running

Constraints

$1 \leq n \leq 100$
$0 \leq MM, SS \leq 60$
$0 \leq ss < 1000$
$1 \leq strlen(name) \leq 15$
It is also guaranteed that the time of each athlete will be unique

Example

Input
5 Adam 03:20.002 04:27.133 05:10.525 Bob 02:10.169 03:33.171 04:25.223 Charlie 03:20.003 03:32.911 04:25.224 David 04:20.010 03:22.199 02:18.189 Eddie 03:11.010 03:39.299 04:22.110
Output
Top 3 Triathlon 1. David 2. Bob 3. Eddie Top 3 Swimming 1. Bob 2. Eddie 3. Adam Top 3 Cycling 1. David 2. Charlie 3. Bob Top 3 Running 1. David 2. Eddie 3. Bob

Explanation

There are 5 athletes competing: Adam, Bob, Charlie, David, and Edward

To get the total time, you can first convert all the time unit to the same unit, in this case we can use seconds with millisecond as floating point

Adam's total time is 777.660 seconds

Bob's total time is 608.563 seconds

Charlie's total time is 678.138 seconds

David's total time is 600.398 seconds

Eddie's total time is 672.419 seconds

Based on the above data, the top 3 of the overall competition are David on the 1st place, Bob on the 2nd, and Eddie on the 3rd place

Continue to th e top 3 of swimming, we got Bob, Eddie, and Adam.

In Cycling, the top 3 are David, Charlie, and Bob

in Running, the top 3 are David, Eddie, and Bob

Tips

You can use "%d:%d.%f" when you want to read time input with the format MM:SS.sss using scanf, no need to do any fancy string parsing