

Problem 1086: High Five

Problem Information

Difficulty: Easy

Acceptance Rate: 74.23%

Paid Only: Yes

Tags: Array, Hash Table, Sorting, Heap (Priority Queue)

Problem Description

Given a list of the scores of different students, `items`, where `items[i] = [IDi, scorei]` represents one score from a student with `IDi`, calculate each student's **top five average**.

Return _the answer as an array of pairs_ `result` _, where_ `result[j] = [IDj, topFiveAveragej]` _represents the student with_ `IDj` _and their**top five average**. Sort _`result` _by_ `IDj` _in**increasing order**._

A student's **top five average** is calculated by taking the sum of their top five scores and dividing it by `5` using **integer division**.

Example 1:

Input: items = [[1,91],[1,92],[2,93],[2,97],[1,60],[2,77],[1,65],[1,87],[1,100],[2,100],[2,76]]
Output: [[1,87],[2,88]] **Explanation:** The student with ID = 1 got scores 91, 92, 60, 65, 87, and 100. Their top five average is $(100 + 92 + 91 + 87 + 65) / 5 = 87$. The student with ID = 2 got scores 93, 97, 77, 100, and 76. Their top five average is $(100 + 97 + 93 + 77 + 76) / 5 = 88.6$, but with integer division their average converts to 88.

Example 2:

Input: items =
[[1,100],[7,100],[1,100],[7,100],[1,100],[7,100],[1,100],[7,100],[1,100],[7,100]] **Output:**
[[1,100],[7,100]]

Constraints:

`* `1 <= items.length <= 1000` * `items[i].length == 2` * `1 <= IDi <= 1000` * `0 <= scorei <= 100` * For each `IDi`, there will be **at least** five scores.`

Code Snippets

C++:

```
class Solution {  
public:  
vector<vector<int>> highFive(vector<vector<int>>& items) {  
  
}  
};
```

Java:

```
class Solution {  
public int[][] highFive(int[][] items) {  
  
}  
}
```

Python3:

```
class Solution:  
def highFive(self, items: List[List[int]]) -> List[List[int]]:
```