

1333. Filter Restaurants by Vegan-Friendly, Price and Distance

Description

Given the array `restaurants` where `restaurants[i] = [idi, ratingi, veganFriendlyi, pricei, distancei]`. You have to filter the restaurants using three filters.

The `veganFriendly` filter will be either *true* (meaning you should only include restaurants with `veganFriendlyi` set to true) or *false* (meaning you can include any restaurant). In addition, you have the filters `maxPrice` and `maxDistance` which are the maximum value for price and distance of restaurants you should consider respectively.

Return the array of restaurant *IDs* after filtering, ordered by **rating** from highest to lowest. For restaurants with the same rating, order them by *id* from highest to lowest. For simplicity `veganFriendlyi` and `veganFriendly` take value *1* when it is *true*, and *0* when it is *false*.

Example 1:

Input: restaurants = [[1,4,1,40,10],[2,8,0,50,5],[3,8,1,30,4],[4,10,0,10,3],[5,1,1,15,1]], veganFriendly = 1, maxPrice = 50, maxDistance = 10

Output: [3,1,5]

Explanation:
The restaurants are:
Restaurant 1 [id=1, rating=4, veganFriendly=1, price=40, distance=10]
Restaurant 2 [id=2, rating=8, veganFriendly=0, price=50, distance=5]
Restaurant 3 [id=3, rating=8, veganFriendly=1, price=30, distance=4]
Restaurant 4 [id=4, rating=10, veganFriendly=0, price=10, distance=3]
Restaurant 5 [id=5, rating=1, veganFriendly=1, price=15, distance=1]
After filter restaurants with veganFriendly = 1, maxPrice = 50 and maxDistance = 10 we have restaurant 3, restaurant 1 and restaurant 5 (ordered by rating from highest to lowest).

Example 2:

Input: restaurants = [[1,4,1,40,10],[2,8,0,50,5],[3,8,1,30,4],[4,10,0,10,3],[5,1,1,15,1]], veganFriendly = 0, maxPrice = 50, maxDistance = 10

Output: [4,3,2,1,5]

Explanation: The restaurants are the same as in example 1, but in this case the filter veganFriendly = 0, therefore all restaurants are considered.

Example 3:

Input: restaurants = [[1,4,1,40,10],[2,8,0,50,5],[3,8,1,30,4],[4,10,0,10,3],[5,1,1,15,1]], veganFriendly = 0, maxPrice = 30, maxDistance = 3

Output: [4,5]

Constraints:

- `1 <= restaurants.length <= 10^4`
- `restaurants[i].length == 5`
- `1 <= idi, ratingi, pricei, distancei <= 10^5`
- `1 <= maxPrice, maxDistance <= 10^5`
- `veganFriendlyi` and `veganFriendly` are 0 or 1.
- All `idi` are distinct.

