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.