

Problem 2724: Sort By

Problem Information

Difficulty: Easy

Acceptance Rate: 83.16%

Paid Only: No

Problem Description

Given an array `arr` and a function `fn`, return a sorted array `sortedArr`. You can assume `fn` only returns numbers and those numbers determine the sort order of `sortedArr`. `sortedArr` must be sorted in **ascending order** by `fn` output.

You may assume that `fn` will never duplicate numbers for a given array.

Example 1:

Input: `arr = [5, 4, 1, 2, 3]`, `fn = (x) => x` **Output:** `[1, 2, 3, 4, 5]` **Explanation:** `fn` simply returns the number passed to it so the array is sorted in ascending order.

Example 2:

Input: `arr = [{"x": 1}, {"x": 0}, {"x": -1}]`, `fn = (d) => d.x` **Output:** `[{"x": -1}, {"x": 0}, {"x": 1}]`
Explanation: `fn` returns the value for the "x" key. So the array is sorted based on that value.

Example 3:

Input: `arr = [[3, 4], [5, 2], [10, 1]]`, `fn = (x) => x[1]` **Output:** `[[10, 1], [5, 2], [3, 4]]`
Explanation: `arr` is sorted in ascending order by number at index=1.

Constraints:

* `arr` is a valid JSON array * `fn` is a function that returns a number * `1 <= arr.length <= 5` *
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Code Snippets

JavaScript:

```
/**
 * @param {Array} arr
 * @param {Function} fn
 * @return {Array}
 */
var sortBy = function(arr, fn) {

};
```

TypeScript:

```
type JSONValue = null | boolean | number | string | JSONValue[] | { [key:
string]: JSONValue };
type Fn = (value: JSONValue) => number

function sortBy(arr: JSONValue[], fn: Fn): JSONValue[] {

};
```