

CFG Graduation Photo Coding Challenge

Task

It is the CFG Degree graduation day and you are a photographer who has the task to take photos of our graduates. The overall group has an even number of students, but Software graduates wear purple mortarboard hats and Data graduates wear black mortarboard hats. In fact, exactly half of all students has purple hats and the other half has black ones.

We need to arrange our students in two rows before taking any photos. Each row must contain the same number of students and follow these precise guidelines:

- All Software students with purple hats must be in the same row.
- All Data students with black hats must be in the same row.
- Each student in the back row must be strictly taller than a student directly in front of them in the front row.

NB: you can assume that the overall group has at least two students.

We are given two input arrays:

- One contains the heights of all the students with purple hats
- Another one contains heights of all the students with black hats.

NB: these arrays will always be the same length and each height (number) will be a positive integer. Please write a function that returns whether or not a graduation photo that follows the above strict guidelines can be taken.

Sample Input

```
purple_hats_heights = [5, 8, 1, 3, 4]
black_hats_heights = [6, 9, 2, 4, 5]
```

Sample Output

```
True                # True, because we can put students in black hats at the back row.
```