Dating App



First you will be given a sequence of integers representing males. Afterwards you will be given another sequence of integers representing females.

You have to start from the **first female** and try to match it with the **last male**.

- If their values are equal, you have to match them and remove both of them. Otherwise you should remove only the female and decrease the value of the male by 2.
- If someone's value is equal to or below 0, you should remove him/her from the records before trying to match him/her with anybody.
- Special case if someone's value divisible by 25 without remainder, you should remove him/her and the next person of the same gender.

You need to stop matching people when you have no more females or males.

Input

- On the **first line** of input you will receive the integers, representing the **males**, **separated** by a **single space**.
- On the second line of input you will receive the integers, representing the females, separated by a single space.

Output

- On the first line of output print the number of successful matches:
 - o "Matches: {matchesCount}"
- On the second line print all males left:
 - o If there are no males: "Males left: none"
 - o If there are males: "Males left: {male1}, {male2}, {male3}, (...)"
- On the third line print all females left:
 - If there are no females: "Females left: none"
 - o If there are females: "Females left: {female1}, {female2}, {female3}, (...)"

Constraints

• All of the given numbers will be valid integers in the range [-100, 100].

















Examples

Input	Output	Comment
3 6 9 12 12 9 6 1 25 25	Matches: 3 Males left: 1 Females left: none	The first pair is the first female with value of 12 and the last male of value 12, their values are equal , so we match them , therefore - remove them from the records . Then we have two more matches (9 == 9 and 6 == 6). But the value of the next male is 3 and the value of the next female is 1 , it's not a match and we remove the female and reduce the male's value by 2. We have a female whose value is 25 and we have to remove her and the next female . Then, we print the desired output .
3 0 3 6 9 0 12 12 9 6 1 2 3 15 13 4	Matches: 4 Males left: none Females left: 15, 13, 4	















