

Problem A

Faith

Source file: faith.{ c | cpp | java | py }

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Lino is confident he'll win the lottery soon. He has been dreaming about driving a Ferrari and traveling around the world.

His previous attempt to get rich was not successful. A country music singer that was a congressional candidate didn't receive as many votes as expected and ended up not favoring candidates of his party.

Despite his failure in the previous journey, he hasn't lose hope. He believes that he is special for God in a different manner than others are and that he was born to be a rich man.

One of his beliefs is that God will send him a sequence of winner lottery numbers. He has already dreamed about numbers, but was no lucky with them. Thus, he decided to follow a different strategy. The next time he dreams with numbers, let's say 2 and 4, he will bet on the second and fourth most common numbers in previous lottery drawings.

He is asking your help to write a program that, given previous lottery drawings and the numbers he dreamed, prints the numbers he must bet on.

Input

The first line of input consists of an integer N ($1 \leq N \leq 500$), which indicates the number of lottery drawing results that will be informed. The next N lines contain six integer numbers B each ($0 < B \leq 60$), separated by a space, indicating a number that was drawn in a previous lottery drawing. The next line contains six integer numbers D each ($0 < D \leq 60$), separated by a space, indicating the numbers Lino has dreamed about. Assume that a number that Lino will dream about will never be bigger than the amount of different numbers that appeared in previous lottery drawings.

Output

Print six integer numbers, separated by a space, representing the numbers that Lino should bet on considering his strategy. If two or more numbers appeared the same amount of times in previous lottery drawings, the lower ones has precedence over the bigger ones.

Example of Input 1

```
5
2 4 6 8 10 12
1 4 7 9 20 30
22 33 41 2 3 7
32 35 44 60 21 12
1 2 3 4 5 6
2 5 7 1 9 10
```

Example of Output 1

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4 6 12 2 8 9
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