Bijele

Problem ID: bijele
CPU Time limit: 1 second
Memory limit: 1024 MB
Difficulty: 1.2

Source: Croatian Open Competition in Informatics 2007/2008, contest #2

Mirko has found an old chessboard and a set of pieces in his attic. Unfortunately, the set contains only white pieces, and apparently an incorrect number of them. A set of pieces **should** contain:

- One king
- One queen
- Two rooks
- Two bishops
- Two knights
- Eight pawns

Mirko would like to know how many pieces of each type he should **add or remove** to make a valid set.

Input

The input consists of 6 integers on a single line, each between 0 and 10 (inclusive). The numbers are, in order, the numbers of kings, queens, rooks, bishops, knights and pawns in the set Mirko found.

Output

Output should consist of 6 integers on a single line; the number of pieces of each type Mirko should add or remove. If a number is positive, Mirko needs to add that many pieces. If a number is negative, Mirko needs to remove pieces.

Sample Input 1

```
0 1 2 2 2 7
```

Sample Output 1

```
1 0 0 0 0 1
```

Sample Input 2

```
2 1 2 1 2 1
```

Sample Output 2

```
-1 0 0 1 0 7
```