

2 23 out of 5

2.1 Problem

Your task is to write a program that can decide whether you can find an arithmetic expression consisting of five given numbers a_i , $1 \leq i \leq 5$ that will yield the value 23.

For this problem we will only consider arithmetic expressions of the following form:

$$(((a_{\pi(1)} o_1 a_{\pi(2)}) o_2 a_{\pi(3)}) o_3 a_{\pi(4)}) o_4 a_{\pi(5)}$$

Where $\pi : \{1, 2, 3, 4, 5\} \rightarrow \{1, 2, 3, 4, 5\}$ is a bijective function (permutation) and $o_i \in \{+, -, \cdot\}$ for $i \in \{1, 2, 3, 4\}$.

2.2 Input

The input consists of 5-tuples of positive integers, each between 1 and 50 (at most 12000). Input is terminated by a line containing five zeroes. This line should not be processed.

2.3 Output

For each 5-tuple, print **Possible** on a single line if there exists an arithmetic expression as described above that yields 23. Otherwise, print **Impossible**.

2.4 Sample Data

Input	Output
1 1 1 1 1	Impossible
1 2 3 4 5	Possible
2 3 5 7 11	Possible
0 0 0 0 0	