# B. Recover the String

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

For each string $s$ consisting of characters '0' and '1' one can define four integers $a_{00}$, $a_{01}$, $a_{10}$ and $a_{11}$, where $a_{xy}$ is the number of **subsequences** of length $2$ of the string $s$ equal to the sequence $\{x, y\}$.

In these problem you are given four integers $a_{00}$, $a_{01}$, $a_{10}$, $a_{11}$ and have to find any non-empty string $s$ that matches them, or determine that there is no such string. One can prove that if at least one answer exists, there exists an answer of length no more than $1\,000\,000$.

## Input

The only line of the input contains four non-negative integers $a_{00}$, $a_{01}$, $a_{10}$ and $a_{11}$. Each of them doesn't exceed $10^9$.

## Output

If there exists a non-empty string that matches four integers from the input, print it in the only line of the output. Otherwise, print "Impossible". The length of your answer must not exceed $1\,000\,000$.

### Examples

| input |
| --- |
| 1 2 3 4 |
| **output** |
| Impossible |

| input |
| --- |
| 1 2 2 1 |
| **output** |
| 0110 |