时间限制：C/C++/Rust/Pascal 5秒，其他语言10秒
空间限制：C/C++/Rust/Pascal 1024 M，其他语言2048 M
Special Judge, 64bit IO Format: %lld

题目描述

Given $N = 1000$ positive integers $a_1, a_2, \ldots, a_N$ and $M = 10^{18}$, please find two distinct and non-overlapping subsets $S, T \subseteq \{1, 2, \ldots, N\}$ such that $\sum_{i \in S} a_i - \sum_{i \in T} a_i$ is a multiple of M.

It can be proven that under the given conditions, there exists at least one valid solution.

输入描述:

The input consists of a single line containing $N = 1000$ non-negative integers $a_1, a_2, \ldots, a_N$ ($1 \le a_i \le 10^{18}$).

输出描述:

The output consists of a single line containing a string of length $N = 1000$ that only includes 0, 1, and 2. Where

- The i-th position being 0 indicates that the element is neither in S nor in T;
- The i-th position being 1 indicates that the element is in S;
- The i-th position being 2 indicates that the element is in T.

If there are multiple valid solutions, output any one of them.

示例1

输入 复制

```
0
```

输出 复制

```
0
```

说明

```
This is a placeholder, and it will NOT be regarded as a test case!
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