

## Problem E. Egor Has a Problem

Input file: *standard input*  
Output file: *standard output*  
Time limit: 1 second  
Memory limit: 512 mebibytes

Egor has come up with a hard problem for a training camp! Here it is:

Given an array  $a$  of  $n$  positive integers sorted in increasing order, find 4 indices  $i < j < p < q$  such that  $a_i \cdot a_q = a_j \cdot a_p$ .

He then wrote the checker to this problem:

```
// returns true if the solution is found,
// returns false if the solution is not found,
// makes the verdict Wrong Answer right away if the found solution is not valid
bool getAnswer(InStream &stream, vector<long long> a) {
    string s = stream.readToken("NO|YES"); // PE if the string is not NO or YES
    if (s == "NO") return false;
    vector<int> b = stream.readInts(4, 1, (int)a.size()); // 4 indices between 1 and n
    int i = b[0] - 1, j = b[1] - 1, p = b[2] - 1, q = b[3] - 1; // -1 to make 0-indexed
    stream.ensuref(i < j && j < p && p < q, "4 indices should be in increasing order");
    stream.ensuref(a[q] / a[p] == a[j] / a[i], "the products are not equal");
    return true;
}
```

The multiplication will overflow `long long`, so Egor used division instead. How smart! Although now Egor might have another problem...

### Input

The first line contains one integer  $n$  ( $4 \leq n \leq 500\,000$ ) — the size of the array.

The second line contains the array  $a_1, a_2, \dots, a_n$  itself ( $1 \leq a_1 < a_2 < \dots < a_n \leq 10^{18}$ ).

### Output

On the first line print “YES” if there is a solution and print “NO” otherwise.

If a solution exists, print the 4 chosen indices in order  $i, j, p, q$ , separated by spaces. If there is more than one solution, you can print any one.

### Examples

<i>standard input</i>	<i>standard output</i>
6 2 6 11 21 47 120	YES 1 3 4 6
5 1 2 6 30 210	NO
4 7 13 77 143	YES 1 2 3 4
4 10 29 31 100	NO

### Note

The code in the statement is a snippet from the actual checker for **this** problem. Here is the link to the full code with highlighting: <https://pastebin.com/3ZpNUA6f>, password: “gkVcB4iqwE”.