

Socks

You will be given two sequences of integers representing socks – left and right socks.

We are trying to connect each sock from one side with the corresponding sock on the other side. Find the **longest sequence that appears in the same relative order**, but not necessarily contiguous.

Input

- You will receive 2 arrays of integers – **left and right socks** – in the following format: "{sock1} ... {sockN}".

Output

- Print the length of the longest sequence that appears in the same relative order.

Constraints

- Prices will be integers in the range [1... 2 147 483 647].
- The input arrays will always contain at least **1 element**.

Examples

| Input | Output |
|--|--------|
| 31 41 29 32 42 40 26 31 30 32 42 28 29 29 | 3 |
| 32 32 29 32 29 29 32 32 29 32 | 4 |