**Maximal increasing sequence**

**Description**

**Write a program that finds the length of the maximal increasing sequence in an array of N integers.**

**Input**

* **On the first line you will receive the number N**
* **On the next N lines the numbers of the array will be given**

**Output**

* **Print the length of the maximal increasing sequence**

**Constraints**

* **1 <= N <= 1024**
* **Time limit: 0.1s**
* **Memory limit: 16MB**

**Sample tests**

| **Input** | **Output** |
| --- | --- |
| **8 7 3 2 3 4 2 2 4** | **3** |