# Problem 1 – Sowing

You are given a field of **good soil** (represented as **1**) and **bad soil** (represented as **0**). You want to plant **chukundur**. But you can only plant it on **good soil** and **there cannot be any other planted chukundur** to its left or right.

Given **n** **seeds** and a **field**, generate all ways you can plant the seeds by following the above rules.

For example, for **n = 3** on the field **1 1 1 1 0 1** we can plant 3 chukundur seeds in the following ways:

**111101**, **111101**, **111101**

#### Input

On the first input line you are given the number of seeds **n**.

On the second input line you are given the **field** - a sequence of integers separated by a single space.

#### Output

Print all ways **n** seeds can be planted in the given field.Display the seeds with **"."**.

The order of printing does not matter.

#### Constraints

* The length **L** of the field sequence will be in the range [1…30].
* The number of seeds **n** will be in the range [1...**L**].
* There will always be at least 1 possible sowing.
* The field will contain only **0**s and **1**s.
* Time limit: **100 ms**. Allowed memory: **16 MB**.

#### Examples

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |
| 3  1 1 1 1 0 1 | .1.10.  .11.0.  1.1.0. |  | 1  1 1 1 1 | .111  1.11  11.1  111. |