**I Want More!**

Time Limit: 1000ms

Memory Limit: 64 MB

“Give me more primogems!!!”, said someone in a Benshin Impact game survey. Don’t worry, I’m sure it wasn’t you. By the way, if you are not familiar with these terms yet, it simply means that he wants to get richer in the game.

Unbelievably, the game company heard his unique complain about the game. And that’s why they released a special event that challenges their players with a super hard minigame, but with tons of primogems as the reward.

In the minigame, there is a path divided into N segments. Each segment is assigned to some random number and there are 100 primogems in each segment. Players can visit some segments to get the primogems. However, there is a catch, that is the player can only move to the right, and they can only move to the segments which has higher number than the current segment. Luckily, the players may start from any segment and are also able to jump, skipping any number of segments to arrive to the segment that they want. Here is the illustration to help you understand the minigame.

Direction of movement



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **5** 100 | **1** 100 | **3** 100 | **2** 100 | **4** 100 | **6** 100 |

You then start to wander, “Hmm.. what could be the maximum amount of primogems a player can possibly get if they play optimally?”

**INPUT**

* The first line of the input contains one integer, N (1 ≤ N ≤ 3000), the number of segments.
* In the second line, there are N integers separated by a space, a1, a2, …, aN (1 ≤ ai ≤ 1000), the number that is assigned to segment i.

**OUTPUT**

* Output one line containing one integer, the maximum amount of primogems a player can possibly get.

**SAMPLE TEST CASE 1**

|  |  |
| --- | --- |
| **INPUT** | **OUTPUT** |
| 6  5 1 3 2 4 6 | 400 |

**SAMPLE TEST CASE 2**

|  |  |
| --- | --- |
| **INPUT** | **OUTPUT** |
| 4  100 99 98 97 | 100 |

**SAMPLE TEST CASE 3**

|  |  |
| --- | --- |
| **INPUT** | **OUTPUT** |
| 5  1 3 2 5 4 | 300 |