Educational DP Contest AtCoder M - Candies

Time limit: 1.0s **Memory limit:** 1G

There are N children, numbered $1, 2, \ldots, N$.

They have decided to share K candies among themselves. Here, for each i $(1 \leq i \leq N)$, Child i must receive between 0 and a_i candies (inclusive). Also, no candies should be left over.

Find the number of ways for them to share candies, modulo $10^9 + 7$. Here, two ways are said to be different when there exists a child who receives a different number of candies.

Constraints

- All values in input are integers.
- $1 \leq N \leq 100$
- $0 \leq K \leq 10^5$
- $0 \leq a_i \leq K$

Input Specification

The first line will contain 2 space separated integers N and K.

The next line will contain N integers, $a_1, a_2, \ldots, a_N$.

Output Specification

Print the number of ways for the children to share candies, modulo $10^9 + 7$.

Note: Be sure to print the answer modulo $10^9 + 7$.

Sample Input 1

```
3 4
1 2 3
```

Sample Output 1

```
5
```

Explanation for Sample 1

There are five ways for the children to share candies, as follows:

- $(0, 1, 3)$
- $(0, 2, 2)$
- $(1, 0, 3)$
- $(1, 1, 2)$
- $(1, 2, 1)$

Here, in each sequence, the i-th element represents the number of candies that Child i receives.

Sample Input 2

```
1 10
9
```

Sample Output 2

```
0
```

Explanation for Sample 2

There may be no ways for the children to share candies.

Sample Input 3

```
2 0
0 0
```

Sample Output 3

```
1
```

Explanation for Sample 3

There is one way for the children to share candies, as follows:

- $(0, 0)$

Sample Input 4

```
4 100000
100000 100000 100000 100000
```

Sample Output 4

```
665683269
```