Pay With Crypto

Time Limit: 1 Second
Memory Limit: 256 MB

In recent years, as cryptocurrencies become increasingly popular, people are able to pay for products using them! Each cryptocurrency has its unique value in USD (rounded to one cent). As a crypto enthusiast, you are interested in how many different combinations of cryptocurrencies can you pay for the product? Two combinations are said to be different if there is at least one unit difference in any type of cryptocurrency used. Since the number can be very large, output the answer modulo 998 244 353.

Input

The first line of input contains one integer and one "two decimal doubles" n and w ($1 \leq n \leq 100, 0.01 \leq w \leq 100.00$), as described in the problem statement.

The second line contains n "two decimal doubles" $a_1, \ldots, a_n$ ($0.01 \leq a_i \leq 100.00$) - the value of the n types of cryptocurrencies you can use.

Output

Output the number of combinations you can use modulo 998 244 353.

Sample Inputs

```
6 9.99
1.00 1.99 3.99 3.00 0.99 10.00
```

Sample Outputs

```
10
```

Note

The ten ways to pay \$9.99 are:

- $\$1.00 \times 9 + \$0.99 \times 1$
- $\$1.00 \times 8 + \$1.99 \times 1$
- $\$1.00 \times 6 + \$3.00 \times 1 + \$0.99 \times 1$
- $\$1.00 \times 6 + \$3.99 \times 1$
- $\$1.00 \times 5 + \$3.00 \times 1 + \$1.99 \times 1$
- $\$1.00 \times 3 + \$3.00 \times 2 + \$0.99 \times 1$
- $\$1.00 \times 3 + \$3.00 \times 1 + \$3.99 \times 1$
- $\$1.00 \times 1 + \$3.00 \times 2 + \$1.99 \times 1$
- $\$3.00 \times 3 + \$0.99 \times 1$
- $\$3.00 \times 2 + \$3.99 \times 1$