

# Arcane Secret

## Problem ID: arcanesecret

Viktor has developed a special formula to try and understand the secrets of the Arcane. He has  $N$  runes where the  $i$ -th rune has a strength  $s_i$ . He wants to identify a core rune to study, but only certain runes can qualify.

He can identify a core rune with the following process:

1. Divide the runes into  $K$  groups of equal size.
2. Take the maximum strength rune of every group and add it into a set  $S$ . If multiple runes within a group tie for the maximum strength, one of them is randomly added into  $S$ . Note that  $S$  will have  $K$  elements.
3. The rune whose strength is the median of  $S$  is a core rune.

How many different runes can possibly be core runes?

### Input

The first line of input contains  $N$  ( $1 \leq N \leq 10^5$ ) and  $K$  ( $1 \leq K \leq N$ ) representing the number of total runes and the number of groups that will be made. It is guaranteed that  $K$  divides  $N$  and  $K$  is odd. The second line of input contains  $N$  space separated integers  $s_1, s_2, \dots, s_N$  ( $1 \leq s_i \leq 10^9$ ) representing the strength of the runes.

### Output

Output the number of possible core runes that exist.

#### Sample Input 1

9 3
1 1 2 3 5 8 13 21 34

#### Sample Output 1

3
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#### Sample Input 2

6 3
4 4 4 4 4 4

#### Sample Output 2

6
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