

Problem F. Funny Card Game

Input file: **funny.in**
Output file: **funny.out**
Time limit: 2 seconds
Memory limit: 256 megabytes

Andrew and his k friends are playing a funny card game. They have a deck of n cards, each one contains a single integer a_i . Andrew is a dealer. His friends are sitting in a circle around him and he deals cards to them.

Andrew chooses one of his friends and starts dealing cards to him, one after another. After each card a player can either say “stop”, or say “more”. If the player says “more” he is dealt another card. After he says “stop”, he gets no more cards and his score is equal to the maximal number of times some value occurs among his cards. For example, if the player is dealt cards with values 2, 3, 4, 3, 2, 1, 2 and 5, his score is 3, because 2 occurs 3 times among his cards and no other value has more occurrences.

Then the next player who has no cards yet is chosen and Andrew deals cards to him in the same way. The game continues until all but one friends have their cards. The last player gets all the remaining cards.

Andrew’s friends has seen the order in which the cards are arranged in the deck. Now they want to choose such strategy that the sum of their scores was maximal possible. Also they want each player to be dealt at least one card.

Help them to develop their strategy: for each player from 1 to $k - 1$ find the card that he must say “stop” after. The last player would receive the rest of the cards.

Input

Input file contains multiple test cases. The first line of each test case contains two integers: n and k ($2 \leq k \leq n \leq 10^5$, $k \leq 100$). The second line contains n integers: numbers on the cards in order they are arranged in the deck. Numbers on the cards do not exceed 10^9 by their absolute values.

The last test case is followed by a line containing two zeroes that should not be processed.

Output

For each test case output two lines. The first line must contain the maximal possible sum of points that the players can achieve. The second line must contain instructions for the players: $k - 1$ integers b_i . The number b_i must be the number of the card in the original deck after which the i -th player must say “stop”. Each player, including the last one, must receive at least one card. The cards are numbered from 1 to n in order they are arranged in the deck.

Examples

funny.in	funny.out
10 2	6
2 3 2 3 2 1 2 1 2 1	5
0 0	

In the given example the first player would get cards 2, 3, 2, 3 and 2, his score is 3. Similarly, the second player gets cards 1, 2, 1, 2 and 1, his score is also 3. The sum of players’ scores is 6 and is maximal possible.