

DMPG '17 G1 - FatalWhale and Candies

Molly is trying to steal some candy from her best friend FatalWhale. Unfortunately, FatalWhale is very organized and will immediately notice if the total sweetness of candies Molly takes is not a multiple of P . Help Molly determine which candies out of the N FatalWhale has in order to take the maximum sweetness!

Constraints

- $N, P \leq 4096$
- You will receive 20% of the points if you find just the maximum sweetness, but in order to receive these points, you must correctly follow the output specification.
- Molly will always take at least one candy.

Input Specification

On the first line of input you will find two space-separated integers, N and P .

On the second line of input you will find the sweetness of the N candies, as space-separated integers s_i . ($0 \leq s_i \leq 500\,000$)

Output Specification

On the first line you will print the maximum sweetness.

On the second line you will print the number of the candies that Molly takes in order to take the maximum sweetness.

On the third line, you will print the indices of the candies Molly takes.

Sample Input

```
7 6
178 25 123 34 56 79 100
```

Sample Output

```
570
6
1 3 4 5 6 7
```

Sample Output [for 20% of points]

570
1
1