# Problem C - Necklace

You want to make a necklace that is exactly $k$ cm long. You want to use colored wooden sticks in the shape of hollow cylinders. The colored sticks are strung together to make a chain by threading a string through the sticks and knotting the ends of the string together. There are k different types of sticks, all with different integer lengths: (in cm) $d_1, d_2, \cdots, d_n$. Of each type there is an arbitrary number of sticks. There can be several of the same type in the chain. You want to use as few sticks as possible for cost reasons.

## Input

The input consists out of:

- One line with two integers $1 \leq n \leq 1000$ and $1 \leq k \leq 100000$, where $n$ is the number of items and $k$ is the target length of your necklace.
- $n$ lines, each containing one integer, the $i$th of which being $1 \leq d_i \leq 1000$, the length of the $i$th stick.

## Output

The minimum number of sticks you could use to complete your necklace or IMPOSSIBLE if there is no configuration of sticks of length $k$.

| **Sample Input 1** | **Sample Output 1** |
|---|---|
| 3 10<br>2<br>3<br>5 | 2 |

| **Sample Input 2** | **Sample Output 2** |
|---|---|
| 2 7<br>3<br>5 | impossible |