

# shopping

## Problem Statement.

Sandra is a strong independant woman. But she loves shopping so much that she decided to spend at least  $S$  dinars to buy clothes.

there are  $n$  different dresses each one with a price  $p_i$  ( $1 \leq i \leq n$ ). Help Sandra find the minimum integer  $k$  so that whatever index  $j$  ( $1 \leq j \leq n - k + 1$ ) she chooses it is guaranteed that the sum of coins she will collect ( $p_j + \dots + p_{j+k-1}$ ) will be greater than or equal to  $S$ . if Sandra can never collect more than the sum  $S$  print "impossible"

## Input.

you will be given as input  $n$  ( $1 \leq n \leq 10^5$ ) the number of dresses.  $S$  ( $1 \leq S \leq 10^6$ ) the amount she has to spend. and  $n$  numbers  $p_i$  ( $0 \leq p_i \leq 10^5$ ) representing the price of the  $i$ -th dress.

## Output.

print  $k$  if it exists and "impossible" if it doesn't exist.

## Examples.

### example 1

Input:

```
8 5
1 0 4 5 0 0 2 1
```

Output:

```
5
```

### example 2

Input:

```
6 1
1 1 1 1 1 1
```

Output:

```
1
```

### example 3

Input:

```
4 10
3 1 1 2
```

Output:

```
impossible
```