

# Raucous Rockers

You just inherited the rights to  $N$  ( $1 \leq N \leq 20$ ) previously unreleased songs recorded by the popular group Raucous Rockers. You plan to release a set of  $M$  ( $1 \leq M \leq 20$ ) compact disks with a selection of these songs. Each disk can hold a maximum of  $T$  ( $1 \leq T \leq 20$ ) minutes of music, and a song can not overlap from one disk to another.

Since you are a classical music fan and have no way to judge the artistic merits of these songs, you decide on the following criteria for making the selection:

- The songs on the set of disks must appear in the order of the dates that they were written.
- The total number of songs included will be maximized.

## PROGRAM NAME: rockers

### INPUT FORMAT

Line 1: Three integers:  $N$ ,  $T$ , and  $M$ .

Line 2:  $N$  integers that are the lengths of the songs ordered by the date they were written.

### SAMPLE INPUT (file rockers.in)

```
4 5 2
4 3 4 2
```

### OUTPUT FORMAT

A single line with an integer that is the number of songs that will fit on  $M$  disks.

### SAMPLE OUTPUT (file rockers.out)

```
3
```