Subset Sum

Input file:	`standard input`
Output file:	`standard output`
Time limit:	2 seconds
Memory limit:	256 megabytes

Chiaki has n integers $a_1, a_2, \ldots, a_n$ and another integer c, and she would like to choose a subset of the n integers whose sum does not exceed c. Find the maximum possible sum of the chosen subset.

Input

There are multiple test cases. The first line of the input contains an integer T ($1 \leq T \leq 2 \times 10^4$), indicating the number of test cases. For each test case:

The first line contains two integers n and c ($1 \leq n \leq 2 \times 10^4$, $1 \leq c \leq 10^9$). The second line contains n integers $a_1, a_2, \ldots, a_n$ ($1 \leq a_i \leq 2 \times 10^4$).

The sum of all n does not exceed 2×10^4.

Output

For each test case, output an integer denoting the answer.

Example

standard input	standard output
3	5
3 5	0
2 3 4	9
3 1	
2 3 4	
3 1000000000	
2 3 4	