Problem F. Fast Spanning Tree

Input file:	*standard input*
Output file:	*standard output*
Time limit:	5 seconds
Memory limit:	256 mebibytes

Wang Xiuhan has an initially empty undirected graph on n vertices.

Each vertex has a weight, which is a non-negative integer.

Also, he has m tuples (a_i, b_i, s_i), where $1 \le a_i, b_i \le n$, $a_i \ne b_i$, and s_i is a non-negative integer.

After that, he starts the following process:

- If there is no such i that a_i and b_i lie in different connected components of the graph and (total weight of vertices in the component of a_i) + (total weight of vertices in the component of b_i) $\ge s_i$, end the process.
- Otherwise, choose the smallest such i, add an edge between a_i and b_i to the graph, write this i in the notepad, and repeat the process (but now on the larger graph).

After the process was completed, a misfortune happened... Someone stole his notepad! Can you help him restore all numbers efficiently?

Input

The first line of input contains two integers n and m: the number of vertices in Xiuhan's graph and the number of tuples he has $(1 \le n, m \le 300\,000)$.

The second line contains n space-separated integers, $w_1, w_2, \ldots, w_n$: weights of the vertices $(0 \le w_i \le 10^6)$.

The next m lines contain a description of Xiuhan's tuples. Each of these lines contains three integers a_i, b_i, s_i $(1 \le a_i, b_i \le n,\ a_i \ne b_i,\ 0 \le s_i \le 10^6)$.

Output

On the first line, print one integer: the number of integers Xiuhan wrote in the notepad.

On the next line, you should write all these integers in the order he wrote them.

Examples

standard input	standard output
5 5 1 4 3 4 0 4 5 5 3 1 1 2 5 2 4 3 1 4 1 4	4 2 3 1 4
3 5 3 2 2 1 2 6 1 2 6 1 2 3 1 2 6 2 3 6	2 3 5