E — Enter The Dragon

The capital of Ardenia is surrounded by several lakes, and each of them is initially full of water. Currently, heavy rainfalls are expected over the land. Such a rain falls to one of the lakes: if the lake is dry and empty, then it will be filled with water; if the lake is already full, then it will overflow, which will result in a natural disaster. Fortunately, the citizens have a dragon at their disposal (and they will not hesitate to use it). The dragon may drink the whole water from a lake in one sitting. Also, the mages of Ardenia already predicted the weather conditions for the next couple of years. The only question is: from which lake and when should the dragon drink to prevent a catastrophe?

Multiple Test Cases

The input contains several test cases. The first line of the input contains a positive integer $Z \leq 40$, denoting the number of test cases. Then Z test cases follow, each conforming to the format described in section *Single Instance Input*. For each test case, your program has to write an output conforming to the format described in section *Single Instance Output*.

Single Instance Input

The first line of the input instance contains two space-separated positive integers $n \leq 10^6$ and $m \leq 10^6$, where n is the number of lakes. (There are at most 10 input instances for which $n \geq 10^5$ or $m \geq 10^5$.) The second line contains the weather forecast for the next m days: m space-separated integers $t_1, t_2, \ldots, t_m$ ($t_i \in [0, n]$). If $t_i \in [1, n]$, it means a heavy rainfall over lake t_i at day i. If $t_i = 0$, there is no rain at day i, and the dragon has the time to drink the water from one lake of your choice. Note that the dragon does not drink on a rainy day.

Single Instance Output

In the first line your program should output word `YES` if it is possible to prevent a catastrophic overflow and `NO` otherwise. In the former case, you should output the second line containing ℓ integers from the range $[0, n]$, where ℓ is the number of zeros in the weather forecast description, i.e., the number of non-rainy days. Each of these integers denotes the number of the lake from which the dragon should drink; zero means the dragon should not drink from any lake (this might be necessary, as even the dragon cannot drink from an empty lake).

Example

Input	Output
4 2 4 0 0 1 1 2 4 0 1 0 2 2 3 0 1 2 2 4 0 0 0 1	NO YES 1 2 NO YES 0 1 0