



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, \dots, 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	NO
2 4	YES
0 0 1 1	1 2
2 4	NO
0 1 0 2	YES
2 3	0 1 0
0 1 2	
2 4	
0 0 0 1	