

External Sequence

This problem is nearly impossible to solve! You are given no goals; you can only guess what the corresponding output is for each input. Good luck!

Input

The first line contains an integer T , which specifies the number of test cases. Then, will follow the descriptions of T test cases.

For each case you will receive an integer N , then, you must print the N -th sequence.

The input must be read from standard input.

Output

For each input case you must print the string "Scenario #i: " where i denotes the case you are analyzing (starting from 1) and the sequence as described above.

The output must be written to standard output.

Input	Output for sample input
5	Scenario #1: 1
0	Scenario #2: 11
1	Scenario #3: 21
2	Scenario #4: 1211
3	Scenario #5: 13211311123113112211
9	

Constraints

• $1 \leq T \leq 41$

• $0 \leq N \leq 40$

The score will be the quantity of characters the code has.