

I Printer Machine

Time limit: 1 sec

Voldemort is back again! In order to kill him, Harry porter need to finish the final horcrux. The final horcux is he needs to draw a nested square of different lengths. He only can do the smaller length squares, but fails against the larger ones. Though he is a great magician, he is unable to solve this problem (he is not a programmer :p); he needs an expert to help him. As you are one of the best programmers in AUST, he asks you to solve the problem.

You will be given an integer **N (N will be odd length)**, print the corresponding nested square to help Harry porter.

Input:

First line there will an integer T ($1 \leq T \leq 20$) which represents number of test cases, next following T lines, there will an integer N ($5 \leq N \leq 100$).

Output:

For each test case print the case number and then print the image of the square. For drawing the lines use character ('#'). See the sample I/O.

Input	Output
2 5 7	Case 1: ##### # # # ##### # # # # ##### # # # ##### Case 2: ##### # # # # # ##### # # # # # # # # ##### # # # # # #####