
Pattern

Jojo found an interesting pattern. When N is 3, the pattern will print the first letter, the second letter, the first letter, the third letter, the first letter, the second letter and lastly the first letter.

Here's the example :

1 : A
2 : ABA
3 : ABACABA
4 : ABACABADABACABA

Help Jojo by printing the pattern when N is known.

Format Input

The first input consist integer T, the number of the testcase. The next T line will consist of integer N.

Format Output

For each test case, print "Case #T: X" with T as the test case number and X is the code.

Constraints

$1 \leq T \leq 10$

$1 \leq N \leq 15$

Sample Input	Sample Output
2	Case #1: ABACABA
3	Case #2: ABACABADABACABAEABACABADABACABA
5	

Hint

This problem can be solved by recursive.