

Prime Triangle

In this problem, you are given a simple task. Denote p_i as the first digit of the *i*-th prime. You need to output a prime triangle with the size of N. A prime triangle with the size N can be constructed as follows:

- the first line contains the first digit of the first prime, which is p_1
- the second line contains the first digit of the next two primes, which are p_2 and p_3
- the third line contains the first digit of the next three primes, which are p_4 , p_5 , and p_6
- . . .
- the N-th line contains the first digit of the next N primes, which are $p_{\frac{N(N+1)}{2}-N+1}$, $p_{\frac{N(N+1)}{2}-N+2}$, ..., and $p_{\frac{N(N+1)}{2}}$

Format Input

The first line consists of an integer T which represents the number of testcases. For each testcase, there is a line containing an integer N, which represent the size of the prime triangle.

Format Output

For each testcase, output "Case # X:" where X indicates the testcase number started from 1. Then, it is followed in the next line with the asked prime triangle.

Constraints

- 1 < T < 100
- $1 \le N \le 100$

Sample Input 1 (standard input)

2 4

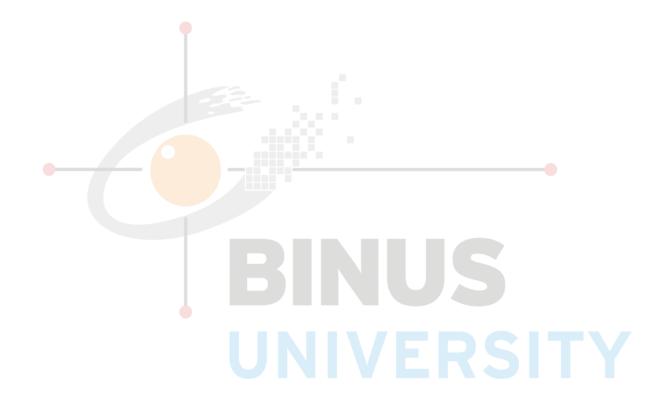
1

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Sample Output 1 (standard output)

Case	e #1:	
2		
35		
713		
7939 Case		
Case	e #2:	
2		



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Pada soal ini, Anda diberikan sebuah tugas. Sebut p_i sebagai digit satuan dari bilangan prima ke-i. Anda diminta untuk mengeluarkan $prime\ triangle\ dengan\ ukuran\ N$. Sebuah $prime\ triangle\ dengan\ ukuran\ N$ dapat dibentuk dengan cara sebagai berikut:

- $\bullet\,$ baris pertama berisi digit satuan dari bilangan prima pertama, yaitu p_1
- \bullet baris kedua berisi digit satuan dari dua bilangan prima selanjutnya, yaitu p_2 dan p_3
- \bullet baris ketiga berisi digit satuan dari tiga bilangan prima selanjutnya, yaitu $p_4,\,p_5,\,$ dan p_6
- ...
- baris ke-N berisi digit satuan dari N bilangan prima selanjutnya, yaitu $p_{\frac{N(N+1)}{2}-N+1}$, $p_{\frac{N(N+1)}{2}-N+2}$, ..., dan $p_{\frac{N(N+1)}{2}}$

Format Input

Baris pertama berisi sebuah bilangan bulat T yang merepresentasikan jumlah kasus uji. Untuk setiap kasus uji tersusun atas sebuah baris yang berisi sebuah bilangan bulat N, yang merepresentasikan ukuran dari $prime\ triangle$.

Format Output

Untuk setiap kasus uji, keluarkan "Case # X:" dimana X merupakan nomor kasus uji yang dimulai dari 1. Kemudian, dilanjutkan pada baris berikutnya dengan $prime\ triangle$ yang diminta.

Constraints

- $1 \le T \le 100$
- $1 \le N \le 100$

Sample Input 1 (standard input)

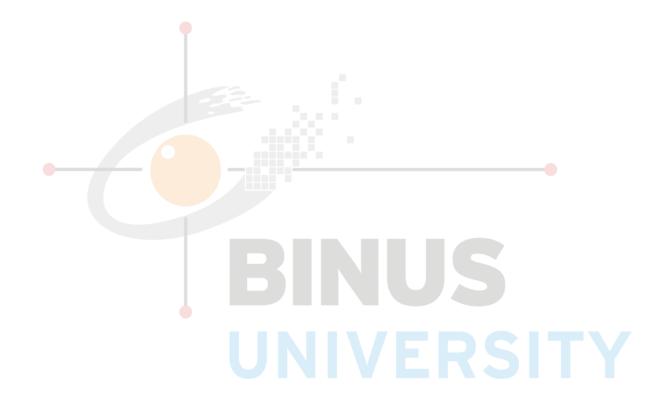
2			
4			
1			

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Sample Output 1 (standard output)

Case	e #1:	
2		
35		
713		
7939 Case		
Case	e #2:	
2		



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