

## Fibo String

Jojo is learning a series called Fibonacci series where  $fib[n] = fib[n - 1] + fib[n - 2]$ . Jojo wondered what if this Fibonacci series was applied to characters, where  $S[n] = S[n - 1] + S[n - 2]$ . For example if Jojo has  $S[0] = a$  and  $S[1] = b$  then  $S[2] = ba$ ,  $S[3] = bab$ ,  $S[4] = babba$  and so on.

### Format Input

Inputs start with integer  $T$  which is the number of test cases. The next  $T$  line contains the integer  $n$ , which is the  $n$ -th Fibonacci sequence in question followed by two characters  $S[0]$  and  $S[1]$ .  $S[0]$  and  $S[1]$  is guaranteed to be only 1 letter.

### Format Output

The answer begins with the format “Case # $X$ :  $S[n]$ ” where  $X$  is the number of test cases and  $S[n]$  is the  $n$ -th order Fibonacci value.

### Constraints

- $1 \leq T \leq 100$
- $1 \leq n \leq 15$

### Sample Input 1 (standard input)

```
3
2 a b
3 a b
4 a b
```

### Sample Output 1 (standard output)

```
Case #1: ba
Case #2: bab
Case #3: babba
```

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### Sample Input 2 (standard input)

```
3
2 c d
4 a a
2 b b
```

### Sample Output 2 (standard output)

```
Case #1: dc
Case #2: aaaaa
Case #3: bb
```

## Fibo String

Jojo sedang belajar sebuah deret yang disebut dengan deret fibonacci dimana  $fib[n] = fib[n - 1] + fib[n - 2]$ . Jojo penasaran bagaimana jika deret fibonacci ini diterapkan kepada karakter, dimana  $S[n] = S[n - 1] + S[n - 2]$ . Contohnya jika Jojo memiliki  $S[0] = a$  dan  $S[1] = b$  maka  $S[2] = ba$ ,  $S[3] = bab$ ,  $S[4] = babba$  dan seterusnya.

### Format Input

Input diawali dengan bilangan bulat  $T$  yaitu banyaknya kasus uji.  $T$  baris berikutnya berisi integer  $n$ , yaitu urutan fibonacci ke- $n$  yang ditanya diikuti dengan dua buah karakter  $S[0]$  dan  $S[1]$ .  $S[0]$  dan  $S[1]$  dijamin hanya berupa 1 buah huruf.

### Format Output

Jawaban diawali dengan format “Case # $X$ :  $S[n]$ ” di mana  $X$  adalah jumlah kasus uji dan  $S[n]$  adalah nilai fibonacci urutan ke- $n$ .

### Constraints

- $1 \leq T \leq 100$
- $1 \leq n \leq 15$

### Sample Input 1 (standard input)

```
3
2 a b
3 a b
4 a b
```

### Sample Output 1 (standard output)

```
Case #1: ba
Case #2: bab
Case #3: babba
```

---

### Sample Input 2 (standard input)

```
3
2 c d
4 a a
2 b b
```

### Sample Output 2 (standard output)

```
Case #1: dc
Case #2: aaaaa
Case #3: bb
```