

Hard Problem

Students at JLB Univeristy have just finished their Algorithm and Programming (AAP) midterms today. Unlike at Binus, the AAP exam at JLB University consists of only multiple choice questions.

After the midterms were finished, the AAP lecturer, Bibi, gave every student the answer key to the questions given in the test. Lili, a student at JLB University, wants to know what grade she will get.

Because Lili is too busy panicking about her score, she has decided to ask you to write a program that will calculate Lili's test results given her answers S and the answer key K .

Format Input

The input consists of T test cases.

Each test case consists of three lines.

The first line contains an integer N , the amount of questions in the test.

The second and third lines contain S , Lili's answers, and K , the answer key given by Bibi.

Format Output

For each test case, output one line containing "Case # X : " (without quotes), where X is the test case number (starting from 1), then followed by an integer G , Lili's grade, rounded down.

Constraints

- $1 \leq T \leq 100$
- $1 \leq N \leq 100$
- Characters in S and K are either A, B, or C.

Sample Input (standard input)

```
2
4
ABCA
ABAB
3
ABB
AAA
```

Sample Output (standard output)

```
Case #1: 50
Case #2: 33
```

Hard Problem

Para mahasiswa JLB University baru saja menyelesaikan ujian tengah semester Algorithm and Programming (AAP) mereka hari ini. Tidak seperti di Binus, ujian AAP di JLB University hanya terdiri dari soal pilihan ganda.

Setelah ujian tengah semester selesai, dosen AAP, Bibi, memberikan kunci jawaban soal yang ada di ujian kepada semua mahasiswa. Lili, seorang mahasiswi di JLB University, ingin tahu apa nilai yang akan dia dapat.

Karena Lili terlalu gugup memikirkan nilainya, ia memutuskan untuk meminta kamu untuk membuat suatu program yang dapat menghitung hasil ujian Lili jika diberikan jawaban Lili S dan kunci jawaban K .

Format Input

Input terdiri dari T test case (kasus uji).

Setiap test case terdiri dari tiga baris.

Baris pertama berisi suatu angka N , jumlah pertanyaan yang ada di ujian.

Baris kedua dan ketiga berisi S , jawaban Lili, dan K , kunci jawaban yang diberikan Bibi.

Format Output

Untuk setiap test case, tampilkan sebuah baris berisi "Case # X : " (tanpa kutip), dimana X merupakan nomor test case (dimulai dari 1), kemudian diikuti oleh G , nilai Lili, dibulatkan ke bawah.

Constraints

- $1 \leq T \leq 100$
- $1 \leq N \leq 100$
- Karakter yang terdapat di S dan K adalah antara A, B, atau C.

Sample Input (standard input)

```
2
4
ABCA
ABAB
3
ABB
AAA
```

Sample Output (standard output)

```
Case #1: 50
Case #2: 33
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