

Lightning

Lili is hearing a loud noise outside her window. Lili knows it is raining hard and lightning must have occurred at that time. The lightning sound lasts for A to B seconds. Other than that it is not lightning.

She wants to know how many times the lightning occurs given the information for N seconds duration there is either a sound or not.

Format Input

The input will consist of several lines of input in "testdata.in" file. On the first line, there is an integer T - the number of test cases. Each test case will be given 3 integers: N - number of total duration, A - number of minimum lightning duration, and B - number of maximum lightning duration. The next line is a binary string length N where '0' means no sound and '1' means there is a sound.

Format Output

Output should be expressed in format "Case #X: Y" - X is the number of the test case, and followed by Y, the number of lightning that occurred.

Constraints

- $1 \le T \le 10^2$
- $1 \le N \le 10^4$
- $1 \le A \le B \le 10^4$

Sample Input (testdata.in)

1 20 3 5 101100111101111111001

Sample Output (standard output)

Case #1: 1

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Lili mendengar suara petir yang sangat keras di luar rumahnya. Lili tahu di luar pasti sedang hujan deras dan petir muncul di saat itu. Suara petir akan ada antara A sampai B detik. Selain itu berarti bukan suara petir.

Lili ingin mengetahui berapa kali muncul suara petir dalam jangka waktu N detik yang diberikan.

Format Input

Input terdiri dari beberapa baris dalam file "testdata.in". Pada baris pertama, terdapat sebuah angka bulat T - jumlah kasus dalam file. Untuk setiap kasus, terdapat 3 buah angka : N - total durasi waktu, A - durasi minimum dari suatu petir, dan B - durasi maksimum dari sebuah petir. Baris berikutnya terdapat suatu string biner yang mana '0' menandakan ketiadaan suara dan '1' berarti terdapat suara yang berbunyi.

Format Output

Output yang dikeluarkan dalam format "Case #X: Y" - X merupakan nomor test case dan akan diikuti oleh Y, jumlah petir yang terjadi pada selang waktu N detik.

Constraints

- $1 \le T \le 10^2$
- $1 \le N \le 10^4$
- $1 \le A \le B \le 10^4$

Sample Input (testdata.in)

1 20 3 5 101100111101111111001

Sample Output (standard output)

Case #1: 1

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