

Greg wants to build a string, S of length N . Starting with an empty string, he can perform 2 operations:

- 1. Add a character to the end of S for A dollars.
- 2. Copy any substring of S , and then add it to the end of S for B dollars.

Calculate minimum amount of money Greg needs to build S .

Input Format

The first line contains number of testcases T .

The $2 \times T$ subsequent lines each describe a test case over 2 lines:
The first contains 3 space-separated integers, N , A , and B , respectively.
The second contains S (the string Greg wishes to build).

Constraints

- $1 \leq T \leq 3$
- $1 \leq N \leq 3 \times 10^4$
- $1 \leq A, B \leq 10000$
- S is composed of lowercase letters only.

Output Format

On a single line for each test case, print the minimum cost (as an integer) to build S .

Sample Input

```
2
9 4 5
aabaacaba
9 8 9
bacbacacb
```

Sample Output

```
26
42
```

Explanation

Test Case 0:
 $S_{initial} = ""$; $S_{final} = "aabaacaba"$
Append "a"; $S = "a"$; cost is 4
Append "a"; $S = "aa"$; cost is 4
Append "b"; $S = "aab"$; cost is 4

Copy and append "*aa*"; $S = \text{"aaba"}a$; cost is 5

Append "*c*"; $S = \text{"aaba"}ac$; cost is 4

Copy and append "*aba*"; $S = \text{"aaba"}acaba$; cost is 5

Summing each cost, we get $4 + 4 + 4 + 5 + 4 + 5 = 26$, so our output for *Test Case 1* is 26.

Test Case 1:

$S_{initial} = \text{""}; S_{final} = \text{"bacbacacb"}$

Append "*b*"; $S = \text{"b"}$; cost is \$8

Append "*a*"; $S = \text{"ba"}$; cost is \$8

Append "*c*"; $S = \text{"bac"}$; cost is \$8

Copy and append "*bac*"; $S = \text{"bacbac"}$; cost is \$9

Copy and append "*acb*"; $S = \text{"bacbacacb"}$; cost is \$9

Summing each cost, we get $8 + 8 + 8 + 9 + 9 = 42$, so our output for *Test Case 2* is 42.