

B IG String Search

1 The Problem

Search some text to locate a particular pattern. If the pattern exists in the text, output the 0-based index of the pattern in the text.

2 The Input

The first line of input will be N ($1 \leq N \leq 1000$), the number of test cases to run. On each of the next $2N$ lines will be two strings. The first string will be the pattern to search for. On the next line will be the text to search in. All pattern strings will have a length between 1 and 100,000 inclusive. All text strings will have a length between 1 and 500,000 inclusive.

3 The Output

For each test case, output the test case number followed by a space, and then the 0-based index of the first letter of the pattern in the text if the pattern can be found, or NOT FOUND if the pattern does not exist in the text.

4 Sample Input

```
5
the
the quick brown fox jumps over the lazy dog
000111
010101010101000110000111
CGAT
TGATCTAGCTAGCTAGCTAGCTAGCATACGCATAGCTA
happy
I could be happy if I didn't have to work
```

5 Sample Output

```
1 0
2 18
3 NOT FOUND
4 11
```