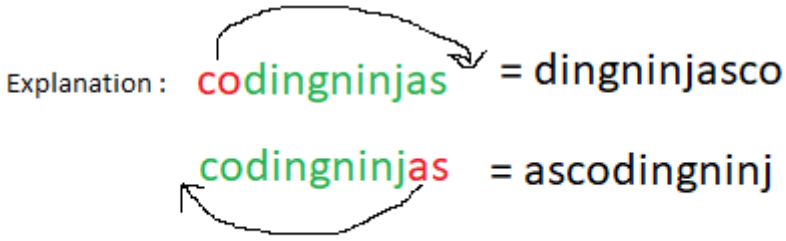
Problem Statement **Suggest Edit**

You are given a string str and an integer D. The task is to rotate the given string left (anticlockwise) and right (clockwise) by D units from the starting index. You are required to return the rotated string.

Example :

Input : codingninjas
2 (d = 2)

Output : dingninjasco (after left rotation by d units)
ascodingninj (after right rotation by d units)



Input Format :

The first line of input contains an integer 'T' which denotes the number of test cases or queries to be run. Then the test cases follow.

The first line of each test case contains the string str.

The second and last line of each test case contains an integer D, representing the number of units by which the string is to be rotated left or right.

Output Format :

For each test case, print the left and right rotations of the string separated by single space respectively.

Output for every test case will be printed in a separate line.

Note:

You do not need to print anything, it has already been taken care of. Just implement the given function.
1. leftRotate(): This function should return the string after left rotation.
2. rightRotate(): This function should return the string after right rotation.

Constraints :

```
1 <= T <= 10
1 <= |str| <= 10^5
1 <= D <= 10^5
Where |str| denotes the length of the string str.

Time Limit: 1 sec
```

Sample Input 1 :

```
1
codingninjas
3
```

Sample Output 1 :

```
ingninjascod jascodingnin
```

Explanation Of The Sample Input 1 :

```
In string “codingninjas” the substring of length D = 3, starting from the
beginning is “cod”, in the left rotation this substring is removed from the
beginning and attached to the end of the string (i.e. anti-clockwise).

Similarly, in the right rotation, the substring of length D = 3 from the end is
“jas”, this substring is removed from the end and attached to the beginning of the
string(i.e. clockwise).
```

Sample Input 2 :

```
2
abcd
4
abc
4
```

Sample Output 2 :

```
abcd abcd
bca cab
```

Explanation Of The Sample Input 2 :

In the first test case, as D is equal to the length of the string so the substring same as the given string needs to be removed from the beginning and from the end and attached to the end and beginning of the empty string in left and right rotation respectively.

In the second test case, as D is greater than the length of the string, so rotate it multiple times. After rotating the given string by 3 units, we get the same string as given, So now rotate the given string by 1 i.e(D%N) units.