Put on pillar

Problem ID: a07p11putonpillar

Now implement the function `put_on_pillar(state, disc, pillar)`.

Note: Use the functions `find_index_of_nth_occurrence()` and `insert_at()` to accomplish this.

Note that we are testing your code differently in this task, please only submit your function definitions, without any code outside the functions!

Input

The function receives three parameters, a sequence s representing the state of the game, an element e, the disc being moved, and an integer k, indicating the pillar to put the disc on.

In the tests, s will be a string with $3 \leq |s| < 12$, e will be a string of length $|e| = 1$ and k will be restricted to $1 \leq k \leq 3$.

It is good if your function also works for other types of sequences and elements, or for input outside these specifications, but that is not part of the requirements.

In the samples below, the first line of the input contains the string s the second line contains the string e and the third line contains the pillar number, k.

Output

The function should return the new state after adding the given disc on top of the specified pillar.

The function should return a sequence s', identical to the input sequence s except with the element e inserted at the top of pillar k, so $|s'| = |s| + 1$. In particular, given a string s as input, s' should also be a string.

In the samples below, the first and only line of the output contains the sequence s'.

Sample Input 1

```
3|2||
1
2
```

Sample Output 1

```
3|21||
```

Sample Input 2

```
3||1|
2
2
```

Sample Output 2

```
3|2|1|
```

Sample Input 3

```
|4|521|
3
1
```

Sample Output 3

```
3|4|521|
```