A little test of knowledge (not hard)

1   Stop index

Return the index of first occurrence of "stop", if there is not such string "stop" in the list, return -1.

```
def stop_index(l):
    """ (list) -> int

    Return the index of first occurrence of "stop",
    if there is not such string "stop" in the list,
    return -1.

    >>> stop_index(["hello", 1, "wow", "stop", 2, 3])
    3
    >>> stop_index(["hello", 1, "wow"])
    -1
    """

    pass
```

2 Original and sorted

Print out original list l and the sorted l line by line. When it comes to list built-in functions from the python library, try to recall what property needs to be used in this question.

```python
def original_and_sorted(l):
    """(list) -> None

    Print out original list l and the sorted l line by line

    >>> original_and_sorted([1, 8, 4])
    [1, 8, 4]
    [1, 4, 8]
    """

    pass
```

3   pair name & age

Precondition: len(l1) == len(l2)
Return the dictionary with name int l1 as the key and age in l2 as the value.
Essentially, pair up the two lists with l1 as keys, l2 as values and make it a
dictionary.

```python
def pair_name_age(l1, l2):
    """(list[str], list[int]) -> dic

    Precondition: len(l1) == len(l2)

    Return the dictionary with name int l1 as the key and age in l2 as the value

    >>> result = pair_name_age(["Annie", "Cherry", "Alex"], [18, 21, 22])
    >>> result == {'Annie': 18, 'Cherry': 21, 'Alex': 22}
    True
    """

    pass
```
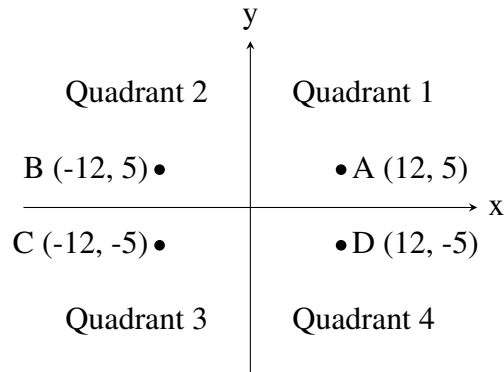
Problem J1: Quadrant Selection

Time limit: 1 second

Problem Description

A common problem in mathematics is to determine which quadrant a given point lies in. There are four quadrants, numbered from 1 to 4, as shown in the diagram below:

For example, the point A, which is at coordinates (12, 5) lies in quadrant 1 since both its x and y values are positive, and point B lies in quadrant 2 since its x value is negative and its y value is positive.

Your job is to take a point and determine the quadrant it is in. You can assume that neither of the two coordinates will be 0.

Input Specification

The first line of input contains the integer x $(-1000 \leq x \leq 1000; x \neq 0)$. The second line of input contains the integer y $(-1000 \leq y \leq 1000; y \neq 0)$.

Output Specification

Output the quadrant number (1, 2, 3 or 4) for the point (x, y).

Sample Input 1
```
12
5
```

Output for Sample Input 1
```
1
```

Sample Input 2
```
9
-13
```

Output for Sample Input 2
```
4
```

Version française sont après la version anglaise

Problem J2: Shifty Sum

Time limit: 1 second

Problem Description
Suppose we have a number like 12. Let's define *shifting a number* to mean adding a zero at the end. For example, if we shift that number once, we get the number 120. If we shift the number again we get the number 1200. We can shift the number as many times as we want.

In this problem you will be calculating a *shifty sum*, which is the sum of a number and the numbers we get by shifting. Specifically, you will be given the starting number N and a non-negative integer k. You must add together N and all the numbers you get by shifting a total of k times.

For example, the shifty sum when N is 12 and k is 1 is: $12 + 120 = 132$. As another example, the shifty sum when N is 12 and k is 3 is $12 + 120 + 1200 + 12000 = 13332$.

Input Specification
The first line of input contains the number N ($1 \leq N \leq 10000$). The second line of input contains k, the number of times to shift N ($0 \leq k \leq 5$).

Output Specification
Output the integer which is the shifty sum of N by k.

Sample Input
```
12
3
```

Output for Sample Input
```
13332
```