Assignment 1: The Next or the Previous Integer

1.1 The Sign of an Integer

You know that there are three kinds of integers: the positive ones, the negative ones, and zero. The sign of an integer can be tested using comparison operators (<, >, <=, and >=) and `if` statement.

Fortunately, `scanf` can read an integer with a sign such as `+8` and `-15`. To print an integer with a sign, just add + between `%` and `d`, i.e. `%+d`, in the format string of `printf`. The following shows a sample program printing some integers with signs.

```c
#include <stdio.h>

int main()
{
    int a = 0, b = 15, c = -237;

    printf("%+d\n", a);
    printf("%+d\n", b);
    printf("%+d\n", c);

    return 0;
}
```

1.2 Programming Assignment 1: norp.c

Write a program to read an integer n and print the next or the previous integer depending on the sign of n. Print $n + 1$ if n is positive; $n - 1$ if n is negative; `+0` if n is zero. Note that the plus sign is printed with zero. C knows that you are a positive person.

The input consists of a single line containing a decimal integer n. Depending on the sign of n, your program should print the next number, the previous number, or zero. The output integer should include the sign always.

Input	**Output**
`8`	`+9`
`+15`	`+16`
`-273`	`-274`
`0`	`+0`