A <u>pointer</u> in C is a way to share a memory address among different contexts (primarily functions). They are primarily used whenever a function needs to modify the content of a variable, of which it doesn't have ownership.

In order to access the memory address of a variable, val, we need to prepend it with & sign. E.g., &val returns the memory address of val.

This memory address is assigned to a pointer and can be shared among various functions. E.g.  $int^*p = \&val$  will assign the memory address of val to pointer p. To access the content of the memory to which the pointer points, prepend it with a  $\star$ . For example,  $\star_p$  will return the value reflected by val and any modification to it will be reflected at the source (val).

```
void increment(int *v) {
     (*v)++;
}
int main() {
    int a;
    scanf("%d", &a);
    increment(&a);
    printf("%d", a);
    return 0;
}
```

You have to complete the function  $void\ update(int\ *a,int\ *b)$ , which reads two integers as argument, and sets a with the sum of them, and b with the absolute difference of them.

```
• a' = a + b
• b' = |a - b|
```

# **Input Format**

Input will contain two integers,  $\boldsymbol{a}$  and  $\boldsymbol{b}$ , separated by a newline.

#### **Output Format**

You have to print the updated value of  $\boldsymbol{a}$  and  $\boldsymbol{b}$ , on two different lines.

P.S.: Input/ouput will be automatically handled. You only have to complete the  $void\ update(int\ *a,int\ *b)$  function.

#### **Sample Input**

# Sample Output

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1

### **Explanation**

```
• a' = 4 + 5 = 9
```

• 
$$b' = |4-5| = 1$$