

# Pointer

A **pointer** 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 **\***. For example, **\*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, *a* and *b*, separated by a newline.

## Output Format

You have to print the updated value of *a* and *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

```
4
5
```

## Sample Output

```
9
1
```

### Explanation

- $a' = 4 + 5 = 9$
- $b' = |4 - 5| = 1$