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# Pointer ★

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A pointer in C++ is used to share a memory address among different contexts (primarily functions). They are used whenever a function needs to modify the content of a variable, but it does not have ownership.

In order to access the memory address of a variable, $val$, prepend it with $\&$ sign. For example, &val returns the memory address of $val$.

This memory address is assigned to a pointer and can be shared among functions. For example, $int^*p = \&val$ assigns the memory address of $val$ to pointer $p$. To access the content of the memory pointed to, prepend the variable name with a *. For example, *p will return the value stored in $val$ and any modification to it will be performed on $val$.

```
void increment(int *v) {
    (*v)++;
}

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

**Function Description**

Complete the update function in the editor below.

update has the following parameters:

- int *a: an integer
- int *b: an integer

**Returns**

- The function is declared with a `void` return type, so there is no value to return. Modify the values in memory so that $a$ contains their sum and $b$ contains their absoluted difference.
- $a' = a + b$
- $b' = |a - b|$

**Input Format**

Input will contain two integers, $a$ and $b$, separated by a newline.

**Sample Input**

```
4
5
```

**Sample Output**

```
9
1
```

**Explanation**

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

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|---|---|
| Difficulty | Easy |
| Max Score | 10 |
| Submitted By | 477853 |

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