





Challenge 2: Calculate the Sum and Absolute Difference

Test your knowledge by solving a slightly more difficult challenge in this lesson.

We'll cover the following ^

- Problem statement
 - Sample input
 - Sample output
- Coding exercise

Problem statement#

Your task is to write a function <code>sum_difference</code>. In the function parameter, you will pass the two pointers of type <code>int</code>, and the function will return nothing in the output.

```
void sum_difference ( int *value1 , int *value2 );
```

Your function should:

Task 1: Sum the values pointed by value1 and value2 and store the result in the location pointed by value1.

Task 2: Calculate the absolute difference of the value pointed out by value1 and value2 (this can be done by subtracting the value pointed out by value1 from the value pointed by value2). Store the result in the location pointed by





Sample input#

```
int value1 = 2 , value2 = 6;
sum_difference (&value1, &value2)
```

Sample output#

```
value1 = 8
value2 = 4
```

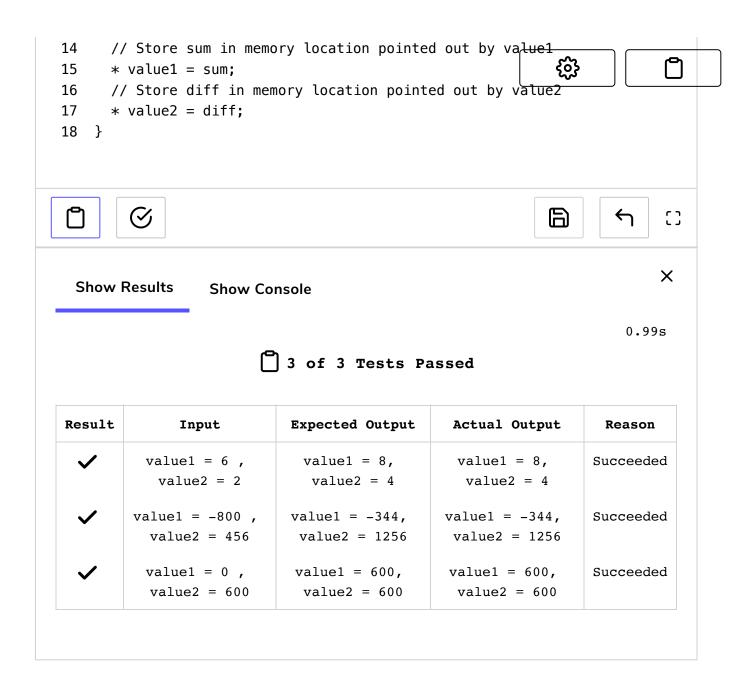
Coding exercise#

Before diving directly into the solution, try to solve it yourself. Then check if your code passes all the test cases.

Your function name should be sum_difference. Else, your code will not compile.

Good luck! 👍

```
1 void sum_difference (int * value1, int * value2) {
2
     // Write your code here
3
     // Initialize variables to 0
     int diff = 0, sum = 0;
4
     // Calculate sum
5
     sum = * value1 + * value2;
6
7
     // Calculate difference
     diff = * value1 - * value2;
     // Check if difference is negative
     if (diff < 0) {
11
      // Multiply it by -1 to make it positive
12
       diff = diff * - 1;
13
     }
```



If you have solved the problem, congratulations!

In case you are stuck, go over the solution review in the next lesson.

