Solution Review: Subtract Two Complex Numbers

Let's go over the solution review of the challenge given in the previous lesson.

We'll cover the following

Solution

Press the **RUN** button and see the output!

```
#include <iostream>

using namespace std;

// Structure to store complex number
struct complex_number {
  // Store real part of complex number
  double real;
  // Store imaginary part of complex number
  double imaginary;
};

// Function subtract
complex_number subtract(struct complex_number c1, struct complex_number c2)
  // Declare a structure variable
  struct complex_number c;
```

```
17    // Subtract real parts
18    c.real = c1.real - c2.real;
19    // Subtract imaginary parts
20    c.imaginary = c1.imaginary - c2.imaginary;
21    // Return structure variable
22    return c;
23  }
24
25  // Function print_complex
26  void print_complex(struct complex_number c) {
27    cout << c.real << " + ";
28    cout << c.imaginary << " i ";
```

(/learn)

Output 1.48s

```
First complex number = -12.3 + -67.4 i
Second complex number = 34 + 89 i
First complex number - Second complex number = -46.3 + -156.4 i
```

Explanation#

struct `complex_number`#

We define the structure `complex_number` on **Line No. 6**. `real` and `imaginary` are the members of the structure that stores the value of type `double`.

`subtract` function#

The `subtract` function takes two values of type `complex_number` as its input parameters. It returns the value of type `complex_number` as its output.

Declare a new structure variable `c` of type `complex_number`. Subtract the `real` member of `c2` from the `real` member of `c1` and store the answer in

a `real` member of `c`. Subtract the `imaginary` member of `c2` from the `imaginary` member of `c1` and store the answer in the `imaginary` member of `c`. Return `c`.

Let's solve another challenge in the upcoming lesson.

Back

Challenge 1: Subtract Two Complex N...

Next

Challenge 2: Calculate Overall Percent...

Mark as Completed

Report an Issue