Solution Review: Calculate the Area of a Rectangle Using Pointers

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;

// area function
void area(double * length, double * width, double * result) {
  // Calculte area of rectangle
  * result = * length * * width;

}

// main function
int main() {
  // Initialize variables length and width
  double length = 8.9, width = 2.1;
  // Initialize variable result
  double result = 0;
  // Print value of result before function call
```

```
    cout << "Before calling function area:" << endl;
    cout << "result = " << result << endl;
    // Call function area and pass the address of variables
    area( & length, & width, & result);
    // Print value of result after function call
    cout << "After calling function area:" << endl;
    cout << "result = " << result << endl;
    return 0;
}
```

Output 1.14s

```
Before calling function area:
result = 0
After calling function area:
result = 18.69
```

Explanation#

area function

The `area` function takes three pointers of type `double` in its input parameters.

Line No. 8: We know that we can access the value of the variable to which the pointer is pointing to use dereference operator `*`. Multiply the value the `length` is pointing to by the value the `width` is pointing to and then store the output in the variable of pointer type `result`.

Let’s solve a slightly harder challenge in the upcoming lesson.