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
- Explanation
  - area function

Solution

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

```cpp
#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;
}
```

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 pointer is pointing to using dereference operator `*`. Multiply the value the `length` is pointing to by the value `width` is pointing to and then store the output in the variable of pointer type `result`.

Let's solve a slightly more difficult challenge in the upcoming lesson.