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// Filename: Lab2_1.cpp
// Programmer: Duncan McFarlane
// Date: 1/23/2020
// Compiler Used: MS Visual Studio 2017
// Purpose: Calculate the area and volume
//           of a cylinder from its radius

#include <iostream>;
#include <cmath>;

using namespace std;

int main() {

    const double PI = 3.14159;
    double radius = 0.0;
    double length = 0.0;

    // Input
    // Get input values for radius and length
    cout << "Enter the radius and length of the cylinder:" ;
    cin >> radius >> length;
    // Processing
    // Calculate the volume and the area
    double area = pow(radius, 2.0) * PI;
    double volume = area * length;
    // Output
    // Output the calculated area and volume
    cout << "The area is " << area << endl;
    cout << "The volume is " << volume << endl;

    //Indicates that the program ran without any errors
    return 0;
};

```

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Enter the radius and length of the cylinder:5.5 12
The area is 95.0331
The volume is 1140.4

```