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// Retrieve program scope.cpp from the Lab 6.2 folder. The code is as follows:
#include <iostream>
#include <iomanip>
using namespace std;
// This program will demonstrate the scope rules.
// Xu Cao
const double PI = 3.14;
const double RATE = 0.25;
void findArea(float, float&);
void findCircumference(float, float&);
int main()
{
    cout << fixed << showpoint << setprecision(2);
    float radius = 12;
    cout << "Main function outer block" << endl;
    cout << "LIST THE IDENTIFIERS THAT are active here" << endl << endl;
    {
        float area;
        cout << "Main function first inner block" << endl;
        cout << "PI, RATE, radius are active here" << endl << endl;
        findArea(radius, area);
        cout << "The radius = " << radius << endl;
        cout << "The area = " << area << endl << endl;
    }
    {
        float radius = 10;
        float circumference;
        cout << "Main function second inner block" << endl;
        cout << "PI, RATE, radius, area are active here" << endl << endl;
        findCircumference(radius, circumference);
        cout << "The radius = " << radius << endl;
        cout << "The circumference = " << circumference << endl << endl;
    }
    cout << "Main function after all the calls" << endl;
    cout << "PI, RATE, radius, area, circumference are active here" << endl <<
    endl;
    return 0;
}
// *****
// findArea
//
// task: This function finds the area of a circle given its radius
// data in: radius of a circle
// data out: answer (which alters the corresponding actual parameter)
//
// *****
void findArea(float rad, float& answer)
{
    cout << "AREA FUNCTION" << endl << endl;
    cout << "PI and rad are active here" << endl << endl;
    answer = PI * rad * rad;
}
// *****
// findCircumference
//
// task: This function finds the circumference of a circle given its radius
// data in: radius of a circle
// data out: distance (which alters the corresponding actual parameter)
//

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// *****  
void findCircumference(float rad, float& distance)  
{  
    cout << "CIRCUMFERENCE FUNCTION" << endl << endl;  
    cout << "PI and rad are active here" << endl << endl;  
    distance = 2 * PI * rad;  
}
```