

Philip Pesic

Week 5

September 18 2022

Week 5 Prog 7

Program 7 - Circle

You write ALL the code,

then run it - Produce the correct output. Turn in code and screen print of successful run, for credit

- * Write a class for a Circle

- * Input only the radius.

- * Write functions that Calculate the circles Circumference, Area and Diameter, and print out the value of the radius

- * Include error checking for radius, must be greater than zero.

Test all combinations

```
//  
// main.cpp  
// Week 5 Prog 7  
//  
// Created by Pippo Pesic on 9/14/22.  
//
```

Philip Pestic

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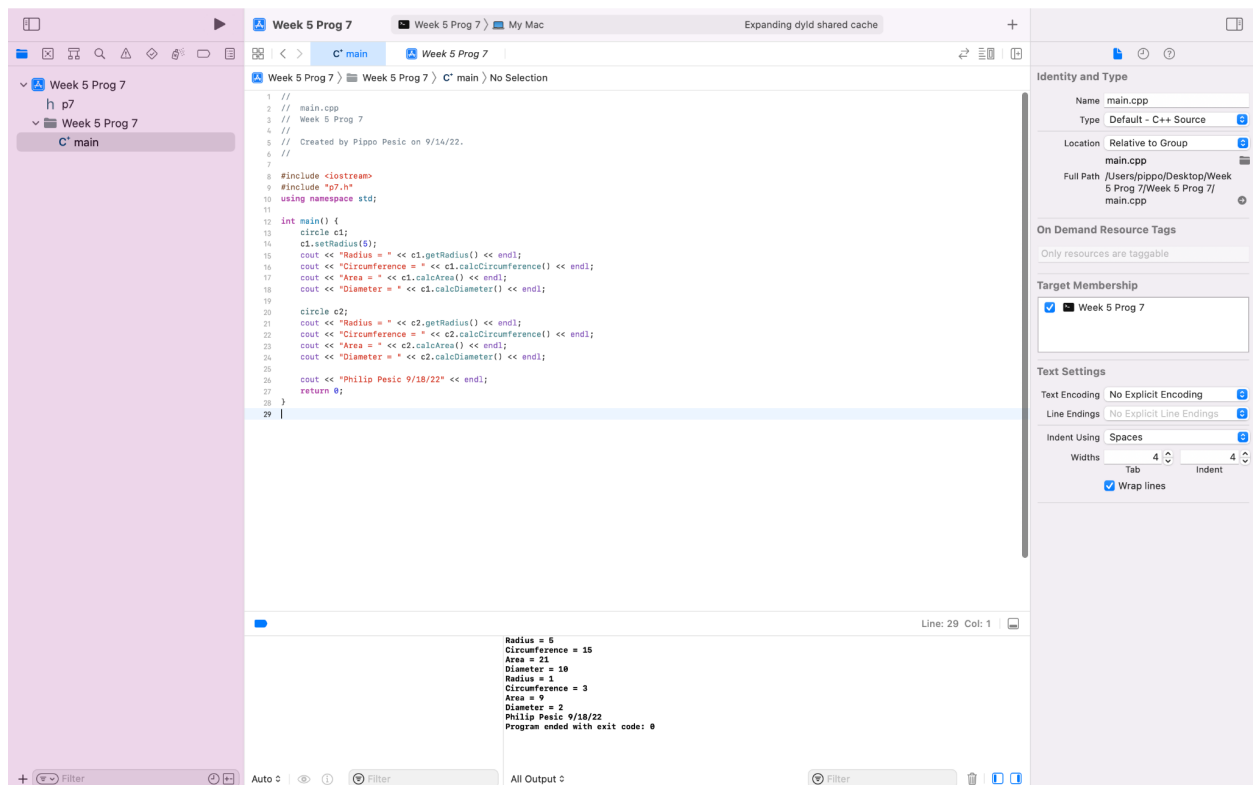
Week 5 Prog 7

```
#include <iostream>
#include "p7.h"
using namespace std;

int main() {
    circle c1;
    c1.setRadius(5);
    cout << "Radius = " << c1.getRadius() << endl;
    cout << "Circumference = " << c1.calcCircumference() << endl;
    cout << "Area = " << c1.calcArea() << endl;
    cout << "Diameter = " << c1.calcDiameter() << endl;

    circle c2;
    cout << "Radius = " << c2.getRadius() << endl;
    cout << "Circumference = " << c2.calcCircumference() << endl;
    cout << "Area = " << c2.calcArea() << endl;
    cout << "Diameter = " << c2.calcDiameter() << endl;

    cout << "Philip Pestic 9/18/22" << endl;
    return 0;
}
```



I practiced writing and importing .h files into a program

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circle
-radius: int;
+calcArea (area: int) return pi * radius^2 +calcCircumference (circumference: int) return 2*pi*radius +calcDiameter (diameter: int) return 2*radius