

Square.h

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1 /*****
2  * AUTHOR      : Saul Moreno
3  * STUDENT ID   : 269491
4  * ASSIGNMENT#5 : Abstract Class
5  * CLASS        : CS1C
6  * SECTION      : MW 5:00pm
7  * DUE DATE     : 3/2/20
8  *****/
9
10 #ifndef SQUARE_H_
11 #define SQUARE_H_
12
13 #include "Shape.h"
14 #include "Math.h" // math functions like sqrt & pow
15
16 class Square: public Shape
17 {
18     public:
19
20     double CalcPerimeter(double a, double b, double c)
21     {
22         return sPerimeter = 4 * a;
23     }
24
25     double CalcArea(double d, double e, double f)
26     {
27         return sArea = pow(d, 2);
28     }
29
30     void Print()
31     {
32         std::cout << "Perimeter of the square is " << std::fixed
33                 << std::setprecision(2) << Square::sPerimeter
34                 <<
35         std::endl << "The area of the square is " << std::fixed
36                 << std::setprecision(2) << Square::sArea;
37     }
38
39     private:
40     double sPerimeter; // CALC & OUT - Holds the value of the perimeter
41     double sArea;      // CALC & OUT - Holds the value of the area
42 };
43
44 #endif /* SQUARE_H_ */
45
```