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1  /*****
2  * PROGRAMMER : Ali Eshghi
3  * STUDENT ID : 1112261
4  * CLASS      : CS1C
5  * SECTION    : MW 5pm
6  * Assign #4  : Enhanced Employee
7  * DUE DATE   : 26 February 2020
8  *****/
9
10 #include "MyHeader.h"
11
12 int main(int argc, char *argv[])
13 {
14     /*****
15     * Perimeter and Area of shapes
16     *
17     * This program prompts the user to input information for a
18     * shape of square and a shape of triangle. then using the
19     * virtual methods and inheritance of the classes, calculates
20     * the perimeter and area of those shapes
21     *
22     * INPUT: square length, triangle sides
23     *
24     * OUTPUT: prints out the perimeter and area of the both shapes
25     *         based on the information that the user put in
26     *
27     *****/
28
29     //Introduction
30     cout << "*****" << endl;
31     cout << "* Perimeter and Area of shapes" << endl;
32     cout << "*" << endl;
33     cout << "* This program prompts the user to input information for a" << endl;
34     cout << "* shape of square and a shape of triangle. then using the" << endl;
35     cout << "* virtual methods and inheritance of the classes, calculates" << endl;
36     cout << "* the perimeter and area of those shapes" << endl;
37     cout << "*" << endl;
38     cout << "* INPUT: square length, triangle sides" << endl;
39     cout << "*" << endl;
40     cout << "* OUTPUT: prints out the perimeter and area of the both shapes" << endl;
41     cout << "*         based on the information that the user put in" << endl;
42     cout << "*" << endl;
43     cout << "*****" << endl;

```

```

44
45 //Variables
46
47 double length; //PROCESS - stores user input length
48 double sideA, sideB, sideC; //PROCESS - stores user input sides
49
50
51 Square r; //PROCESS - square class type variable
52 Triangle t; //PROCESS - triangle class type variable
53
54 //check the 3 arguments are provided
55 if(argc < 2)
56 {
57     cout << "Argument not provided correctly\n";
58     return 1;
59 }
60
61 //Display the first and last name
62 cout << "First name: " << argv[1];
63 cout << "\nLast name: " << argv[2];
64
65 //Display second character
66 cout << "\nSecond character of first name is: " << argv[1][1];
67 cout << "\nSecond character of last name is: " << argv[2][1];
68 cout << endl;
69
70 //getting the information for square
71 cout << "For square:" << endl;
72 cout << "Enter length: ";
73 cin >> length;
74 r.setLength(length);
75 r.calcArea();
76 printPerimeter(r);
77
78 // printPerimeter(r);
79 printArea(r);
80
81 cout << endl;
82
83 //getting the information for triangle
84 cout << "For triangle:" << endl;
85 cout << "Enter length of side A: ";
86 cin >> sideA;

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main.cpp

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87  cout << "Enter length of side B: ";
88  cin >> sideB;
89  cout << "Enter length of side C: ";
90  cin >> sideC;
91  t.setSideA(sideA);
92  t.setSideB(sideB);
93  t.setSideC(sideC);
94  printPerimeter(t);
95  printArea(t);
96  return 0;
97 }
98
```