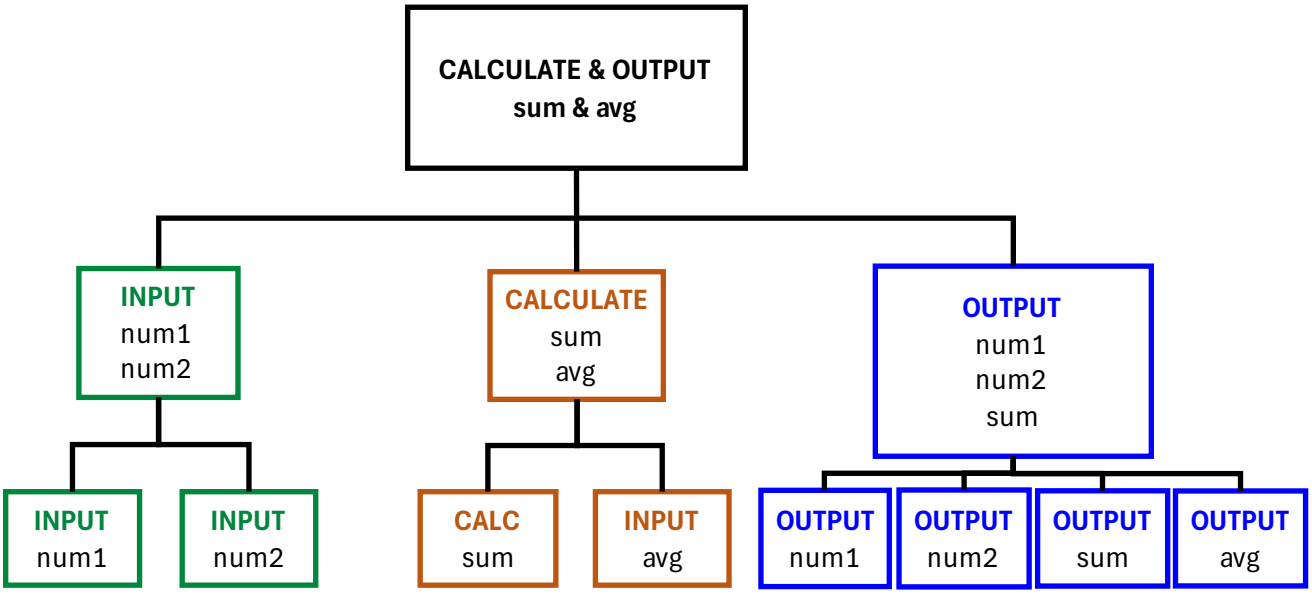
```
 1 ************************************************************
 2 * PROGRAMMED BY : Blake Allard & Cade Coxon
 3 * CLASS         : CS1A
 4 * SECTION       : MW: 8a
 5 * LAB #8        : Intro to Programming
 6 ************************************************************
 7
 8 Enter the first integer: 32
 9 Enter the second integer: 41
10
11 32 + 41 = 73
12
13
14 Enter the first integer: 24
15 Enter the second integer: 1258
16
17 24 + 1258 = 1282
18
19
20 Enter the first integer: 34
21 Enter the second integer: 563
22
23 34 + 563 = 597
```

```cpp
/*******************************************************************************
 * AUTHOR    : BLAKE ALLARD , CADE COXON
 * STUDENT ID: 358888 , 1227003
 * LAB #8    : Introduction to Programming
 * CLASS     : CS1A
 * SECTION   : M/W 8AM
 * DUE DATE  : 10/08/24
 ******************************************************************************/
#include <iostream>     /* cout, cin      */
#include <iomanip>      /* setw, setprecision */

using namespace std;

/*******************************************************************************
 * INTRO TO PROGRAMMING
 *------------------------------------------------------------------------------
 * This program will read in two values and output the sum.
 *------------------------------------------------------------------------------
 * INPUT:
 * firstNum - First value to be summed.
 * secondNum - Second value to be summed.
 *
 * OUTPUT:
 * sum - The sum of the two values input.
 ******************************************************************************/

int main()
{
    /*******************************************************************************
     * CONSTANTS
     * -----------------------------------------------------------------------------
     * OUTPUT - USED FOR CLASS HEADING
     * -----------------------------------------------------------------------------
     * PROGRAMMER : Programmer's Name
     * CLASS : Student's Course
     * SECTION : Class Days and Times
     * LAB_NUM : Lab Number (specific to this lab)
     * LAB_NAME : Title of the Lab
     ******************************************************************************/

    const char PROGRAMMER[26] = "Blake Allard & Cade Coxon";
    const char CLASS[5]       = "CS1A";
    const char SECTION[7]     = "MW: 8a";
    const int  LAB_NUM        = 8;
    const char LAB_NAME[21]   = "Intro to Programming";

    int firstNum;           // IN & CALC, OUT - first value to sum
    int secondNum;          // IN & CALC, OUT - second value to sum
    int sum;                // CALC & OUT - sum of 2 integers input

    /*******************************************************************************
     * OUTPUT - Class Heading
     ******************************************************************************/
    cout << left;
    cout << "*****************************************************\n";
    cout << "* PROGRAMMED BY : "  << PROGRAMMER << endl;
    cout << "* "      << setw(14) << "CLASS"    << ": " << CLASS    << endl;
    cout << "* "      << setw(14) << "SECTION"  << ": " << SECTION  << endl;
    cout << "* LAB #" << setw(9)  << LAB_NUM    << ": " << LAB_NAME << endl;
    cout << "*****************************************************\n\n";
    cout << right;

    /*******************************************************************************
     * INPUT - reads in two inputs from the user (firstNum & secondNum)
     ******************************************************************************/
    cout << "Enter the first integer: ";
    cin  >> firstNum;

    cout << "Enter the second integer: ";
    cin  >> secondNum;

    /*******************************************************************************
     * PROCESSING - Calculates the sum of the two inputs
     ******************************************************************************/
    sum = firstNum + secondNum;

    /*******************************************************************************
     * OUTPUT - the input values and the sum.
     *
```

```
80       * For example, if firstNum = 32 & secondNum = 41 output will be:
81       *
82       * 32 + 41 = 73
83       ********************************************************************************/
84      cout << endl;
85      cout << firstNum
86           << " + " << secondNum
87           << " = " << sum
88           << endl;
89
90      return 0;
91  }
92
```

Name: Blake Allard , Cade Coxon
Class: M/W 8am



INPUT
num 1
num 2

OUTPUT
num1
num2
sum
avg

CALCULATE
sum = num1 + num2
avg = sum / 2

NAME: Blake Allard , Cade Coxon
Class: M/W 8am

BEGIN

```
    INPUT   num1  = 0
    INPUT   num2  = 0

    CALC    sum   = num1 + num2
    CALC    avg   = sum / 2

    OUTPUT  num1
    OUTPUT  num2
    OUTPUT  sum
    OUTPUT  avg
```

END

VARIABLE LIST:

INPUT
num 1
num2

OUTPUT
sum
avg

PROCESSING
<none>

```
 1 ************************************************************
 2 * PROGRAMMED BY : Blake Allard & Cade Coxon
 3 * CLASS         : CS1A
 4 * SECTION       : MW: 8a
 5 * LAB #8        : Intro to Programming
 6 ************************************************************
 7
 8 Enter the first integer: 32
 9 Enter the second integer: 41
10
11 32 + 41 = 73
12 The average is: 36.50
13
14
15 Enter the first integer: 24
16 Enter the second integer: 1258
17
18 24 + 1258 = 1282
19 The average is: 641.00
20
21
22 Enter the first integer: 34
23 Enter the second integer: 563
24
25 34 + 563 = 597
26 The average is: 298.50
27
```

```cpp
/*******************************************************************************
 * AUTHOR    : BLAKE ALLARD , CADE COXON
 * STUDENT ID: 358888 , 1227003
 * LAB #8    : Introduction to Programming
 * CLASS     : CS1A
 * SECTION   : M/W 8AM
 * DUE DATE  : 10/08/24
 ******************************************************************************/
#include <iostream>      /* cout, cin      */
#include <iomanip>       /* setw, setprecision */

using namespace std;

/*******************************************************************************
 * INTRO TO PROGRAMMING
 *------------------------------------------------------------------------------
 * This program will read in two values and output the sum.
 *------------------------------------------------------------------------------
 * INPUT:
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 * secondNum - Second value to be summed.
 *
 * OUTPUT:
 * sum - The sum of the two values input.
 ******************************************************************************/

int main()
{
    /*******************************************************************************
     * CONSTANTS
     * -----------------------------------------------------------------------------
     * OUTPUT - USED FOR CLASS HEADING
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     * PROGRAMMER : Programmer's Name
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     * LAB_NUM : Lab Number (specific to this lab)
     * LAB_NAME : Title of the Lab
     ******************************************************************************/

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    const char CLASS[5]       = "CS1A";
    const char SECTION[7]     = "MW: 8a";
    const int  LAB_NUM        = 8;
    const char LAB_NAME[21]   = "Intro to Programming";

    int    firstNum;        // IN & CALC, OUT - first value to sum
    int    secondNum;       // IN & CALC, OUT - second value to sum
    int    sum;             // CALC & OUT - sum of 2 integers input
    float  avg;              // CALC & OUT - avg of 2 integers input

    /*******************************************************************************
     * OUTPUT - Class Heading
     ******************************************************************************/
    cout << left;
    cout << "*************************************************************\n";
    cout << "* PROGRAMMED BY : "  << PROGRAMMER << endl;
    cout << "* "      << setw(14) << "CLASS"    << ": " << CLASS    << endl;
    cout << "* "      << setw(14) << "SECTION"  << ": " << SECTION  << endl;
    cout << "* LAB #" << setw(9)  << LAB_NUM    << ": " << LAB_NAME << endl;
    cout << "*************************************************************\n\n";
    cout << right;

    /*******************************************************************************
     * INPUT - reads in two inputs from the user (firstNum & secondNum)
     ******************************************************************************/
    cout << "Enter the first integer: ";
    cin  >> firstNum;

    cout << "Enter the second integer: ";
```

```
71      cin  >> secondNum;
72
73      /*****************************************************************************
74       * PROCESSING - Calculates the sum of the two inputs
75       *            - Calculates the avg of the two inputs
76       *****************************************************************************/
77      sum = firstNum + secondNum;
78      avg = sum / 2.0;
79
80      /*****************************************************************************
81       * OUTPUT - the input values, the sum, and the avg
82       *
83       * For example, if firstNum = 32 & secondNum = 41 output will be:
84       *
85       * 32 + 41 = 73
86       * The average is: 36.50
87       *****************************************************************************/
88      cout << endl;
89      cout << firstNum
90           << " + "              << secondNum
91           << " = "              << sum
92           << endl;
93      cout << fixed              << setprecision(2);
94      cout << "The average is: " << avg
95           << endl;
96
97      return 0;
98  }
99
```