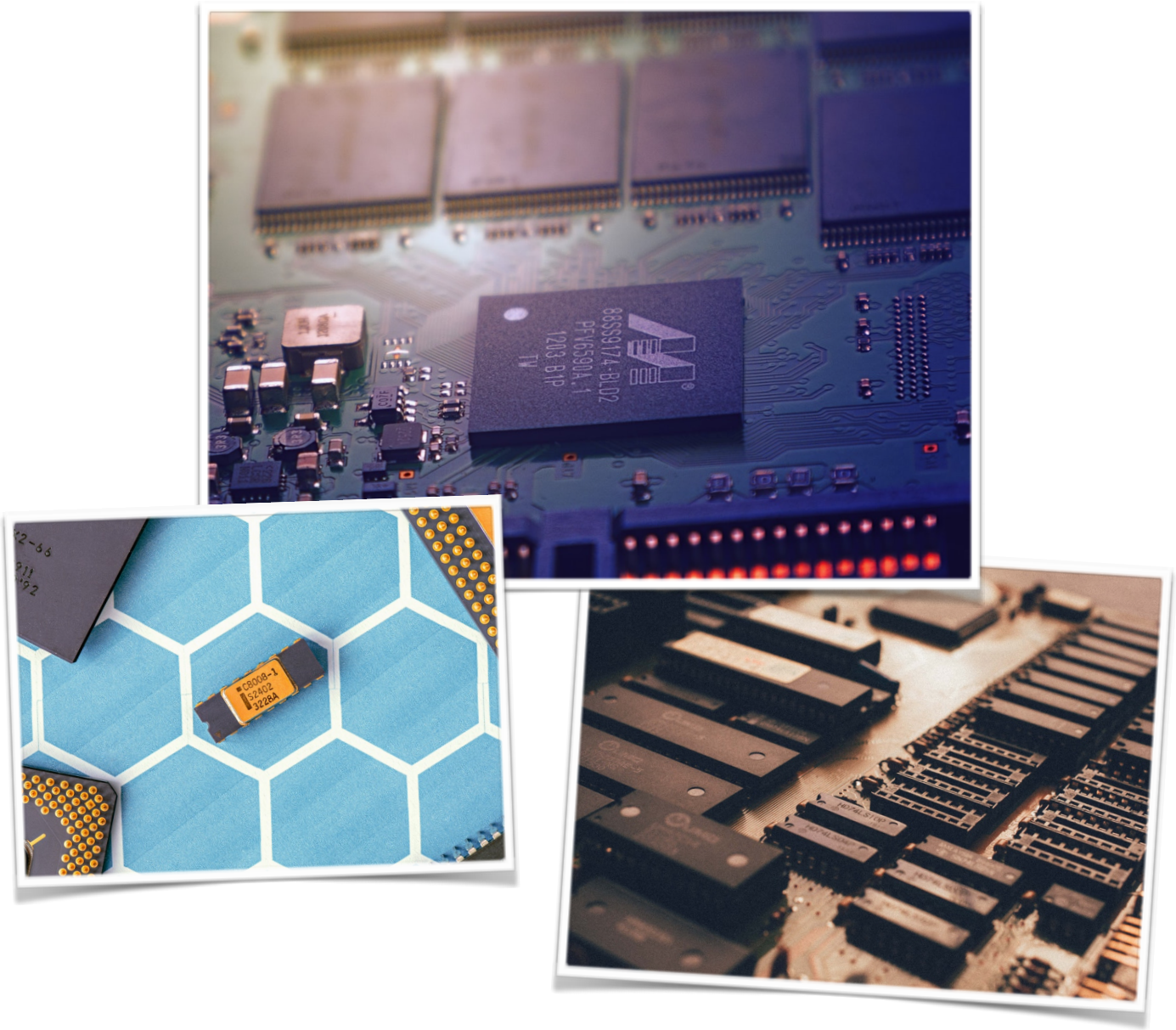
Due
February 02, 2018

Project 2 - C++

Equivalent Resistance



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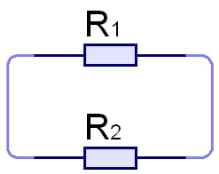
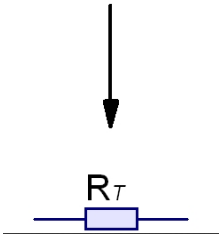
Instructions

In electronics, two parallel resistors can be reduced to a single resistor by using a simple formula. Create a program that asks the user for two resistor values, calculate the equivalent resistance, and output the total resistance. Note, the total resistance should be a float data type.



$$R_T = \frac{R_1 \times R_2}{R_1 + R_2}$$



Below you will find the output of the program. Your output should be identical to the one shown below.

```
|=======================================|
|   Calculate Parallel Resistance       |
|=======================================|
| Enter two resistor values and the     |
|     program will calculate the        |
|     the equivalent resistance.        |
|=======================================|


Enter two resistor values as whole numbers: 1100 3300

The equivalent resistance is: 825.00
```

Create a program header that states what the program does. Put it in a “box” like the one below using simple string literals and the cout statement. Use the \t character to move all the lines of code over one tab in each output line. Also use either \n or endl to move the cursor down a line.

The input data types for the two variables you will use to hold the resistance values should be two integer types. The total equivalent resistance output variable should be a float data type.

Note: You will need to cast the result of the calculation to a floating point value in order to get the decimal values to be correct. We will discuss this in class.

When done, turn in your .cpp file to the D2L dropbox project 2.