

# Activity 2C

## C++ Basics

CSI-140 Introduction to Programming

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Follow these steps to deepen your understanding of variables, data types, and operators. You'll work with the provided `order_calculator.cpp` starter code and answer each question by editing, running, observing, and documenting the results.

### Set up your environment

- Open your favorite IDE.
- Create a new project named `Activity2B`.
- Copy in the starter code from `order_calculator.cpp`.
- Run the base code as is to ensure it works.
- Verify that it prints the subtotal, tax, shipping, total cost, and whether the order is within your budget.

### Q1. Record the output as it is here

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### Q2. Answer the following questions:

1. What is the data type of the variable `quantity`? (3 Points)

2. What is the data type of the variable **subtotal**? (3 Points)

3. What is the data type of the variable **within\_budget**? (3 Points)

4. Name the operator used in **line 15**. (2 Points)

5. Name the operators used in **line 19**. (4 Points)

### Q3. Thinker and Tinker

1. If the store adds a \$2.00 handling fee after tax:  
(a) Explain how would you modify the code to include this new fee.

- (b) Give the modified code block below. (Do not give the entire code.)

- (c) Where would you place this new line in the code?

- (d) What would the new total cost be?

2. If you want to buy 5 books instead of 3:

(a) Explain how would you modify the code to include the above change (15 Points)

(b) Give the code block below. (Do not give the entire code.) (5 Points)

(c) What would the new total cost be? (5 Points)