

## CPS 150-N1 Lab 2

**Goal:** To practice declaring and using variables, and writing input and output statements.

For this lab, you will write a program which accepts your name and a list of courses you are taking this semester as input and outputs them in a tabular format, with your total credit hours (which should be computed, not input directly).

**Part 1:** Create a C++ workspace called “lab2.” Open a source file, also called lab2, and begin the program with the preprocessor directives (the include statements for the libraries `iostream` and `string`). Then begin the main function and declare the necessary variables for the input described below, but precede the declarations with the comment “declaring variables.”

**Input:** First name, Last name, course names, credit hours for each course. Use a variable of type `string` for your first name and a variable of type `string` for your last name. Use a separate string variable for each course name, and a separate integer variable for the credit hours for each course. You will also need an integer variable for the total credit hours.

**When you have completed this, ask the instructor or a lab assistant to check your work.**

**Part 2:** Write the input statements. For each variable, you will need a `cout` statement to prompt the user for what to enter, and a `cin` statement to read that information. Precede this section with the comment “read user input.”

**When you have completed this, ask the instructor or a lab assistant to check your work.**

**Part 3:** Write a statement which calculates total credit hours by adding the credit hours for each course. Precede this section with the comment “compute total credit hours.”

**When you have completed this, ask the instructor or a lab assistant to check your work.**

**Part 4:** Write output statements so that your output is similar to that shown below. Precede this section with the comment “output results.”

Fall Semester 2004  
Lucy Lowell is taking the following courses:

Course Name	Credit Hours
CPS151	4
MTH168	4
REL103	3
ENG101	3

Total credit hours this semester: 14

**When you have completed this, ask the instructor or a lab assistant to check your work.**

**Part 5.** Run your program and ensure that you get correct output.

**When you have completed this, ask the instructor or a lab assistant to check your work.**