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|  | LAB #1  Operators, Expressions, Constants, and Data Types (including File IO) |  |

This lab exercise is closed book/closed notes and an individual effort. It is to be completed in person on this sheet. This lab is worth 50 points and you will have 75 minutes to complete it. Fill in the following blanks with the missing code (pay close attention to syntax!)

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| #include \_\_\_\_\_\_\_\_\_ // for console io  #include <string> // for access to strings  #include <fstream> // for file io  using namespace std; // using the standard namespace  /\*  LAB #1  TOOP Fall 2021  \*/  \_\_\_\_\_ \_\_\_\_\_\_\_ { // define our entry point  \_\_\_\_\_\_ \_\_ "Hello, TOOP! Welcome to the First Lab!\n"\_\_ // print a nice welcome message  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ // declare and initialize an int x to the value of 10  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ // declare and initialize an int y to the value 3  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ // declare and initialize a double z to the value 10.2  \_\_\_\_\_\_ \_\_ "y + x = " \_\_ \_\_\_\_\_\_\_\_ \_\_ endl\_\_ // print “y + x = ” and the output of y+x.  \_\_\_\_\_\_ name\_\_ // declare a string name  \_\_\_\_\_ age\_\_ // declare an int age  \_\_\_\_\_\_ \_\_ "Please enter your first name: "\_\_ // request the user's first name  \_\_\_\_\_ \_\_ name\_\_ // input the first name into the name variable  \_\_\_\_\_\_ \_\_ "Please enter your age: "\_\_ // request the user's age  \_\_\_\_\_ \_\_ age\_\_ // input the user's age into the age variable  // print the user's name and age  \_\_\_\_\_\_ \_\_ "You are " \_ \_\_\_\_\_\_\_\_\_ \_\_ ", and you are " \_\_ \_\_\_\_\_\_\_ \_\_ endl\_\_  ofstream outfile\_\_ // create an output file stream called myfile  // open lab1.txt (in local directory) in append mode (ios::app)  \_\_\_\_\_\_\_\_.open("lab1.txt", ios::app)\_\_  \_\_\_\_\_\_\_\_ \_\_ name \_\_ " used our program!"\_\_ // input the user's name  \_\_\_\_\_\_\_\_.close()\_\_  \_\_\_\_\_\_\_ contents\_\_ // declare a string called contents  \_\_\_\_\_\_\_\_\_\_ infile\_\_ // create an input file stream  infile.open("lab1.txt")\_\_ // open the output file  getline(infile, contents)\_\_ // read the first line  \_\_\_\_\_\_ \_\_ contents \_\_ endl\_\_ // print the first line  x = z; // BONUS+2: what is the value of x after this command is run? \_\_\_\_\_\_\_  x %= y; // BONUS+3: what is the value of x after this command is run? \_\_\_\_\_\_\_  } |