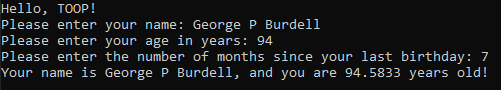
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|  | Homework #1  Operators, Expressions, Constants, and Data Types (including File IO) |  |

This assignment is worth 20 points. Full Collaboration is authorized however all work must be your own and you must understand everything submitted.

1. Ensure that you have read the lessons on [cplusplus.com](http://www.cplusplus.com/doc/tutorial/). Your solution should be a Code::Blocks project. All work will be done in one .cpp file. When you are ready to submit (or whenever you would like to save your work), you should “push” your work into your GitHub repository.
2. ([Structure of a program](http://www.cplusplus.com/doc/tutorial/program_structure/)) Write the basic outline of a C++ program. (2 pts)
   1. Write a program that prints “Hello, TOOP!” (without the quotation marks) to the console. You may choose to use explicit qualification or *using* declarations.
3. ([Variables and types](http://www.cplusplus.com/doc/tutorial/variables/)) Initialize a few variables for later on. (3 pts)
   1. Declare the following variables
      1. A string called “name”. This is the name of the user.
      2. An integer called “age”. This is the age in whole number years of the user.
      3. A double called “decimalAge”. This is a decimal value representing how old the user is in portions of a year. For example, if I were 19 years and three months old, I would be 19.25 years old.
4. ([Basic input and output](http://www.cplusplus.com/doc/tutorial/basic_io/)) Request and store some input from the user. (10 pts)
   1. You will initialize the variables from part 4 with the user’s responses.
      1. Request a user’s full name (first and last!) and store it in “name” (hint: you might not want to use cin for this!)
      2. Request a user’s age in years and store it in “age”
      3. Request the number of months since the user’s last birthday. You will then initialize “decimalAge” to the proper value. (hint: it may be helpful to use intermediary variables to assist in the calculations.)
   2. You will then print a summary to the user of the information entered. Your output should model the response shown below:



1. ([IO with files](http://www.cplusplus.com/doc/tutorial/files/)) We want to keep a record of who has used our program (for posterity’s sake!). (5 pts)
   1. To do this, we will keep a text record of all users’ names and decimal ages in a file called “history.txt”. This file will be maintained in the local directory.
   2. Each line should be formatted “[name] : [decimalAge]”