HW: Annual Growth

Points

Points		**Due**
10	Design	January 27, 2017
90	Runs correctly	February 1, 2017
100	**TOTAL**	

Submission

1. **Design**
    - Submit on eCampus.
2. **Source Code**
    - Submit on Vocareum.
    - Your program code should be submitted as a single .cpp file (DO NOT submit an entire Visual Studio or Xcode project).

Specifications

Design

You can hand write and scan or take a picture. Regardless, get that image into a PDF document and upload to eCampus.

1. Identify which variables you need.
2. Illustrate the program flow using a flowchart. Flowcharts will be covered in lab on Tuesday, January 23, 2017.
3. Determine a few sets of sample inputs and hand calculate the expected outputs. This will give you data to help you test your program.

Program

Implement a program that:

1. Asks the user to enter her/his:
    - first name,
    - last name,
    - birth year,
    - and height (in feet and inches; e.g., 5'10").
    - *Note: You will need to ask for feet and inches for height separately.*
2. Subsequently,
    - approximates the user's age as their birth year subtracted from the current year (2017).
    - calculates his/her height in centimeters.
    - *Note: 1 inch is 2.54 centimeters; moreover, there are 12 inches in one foot.*
    - computes her/his average annual growth per year in centimeters, under the assumption that one's height at birth is 51 cm.

Your implementation should be written such that it is easily readable by other programmers. Use comments where appropriate and use appropriate variable identifiers.

Example Program Run

```
John
Doe
1999
5
10

Hello John Doe. You are 18 years old in 2017, and your height is
177.8 cm. That means that you grew an average of 7.1 cm per year
```

(assuming you were 51 cm at birth).

Note: you might get additional decimal places, but numbers should be very close.