

HW: Annual Growth

Points

Points	
100	Runs correctly
100	TOTAL

Submission

- **Source Code**
 - Submit on Mimir
 - Your program code should be submitted as a single source (.cpp) file named main.cpp.

Objectives

- Use of standard input and standard output.
- Declaring, Defining and Using variables
- Use division avoiding the problems associated when using integer division when floating point division should be used.

Specifications

Program

Implement a program that:

1. Get the following from the user with the prompts indicated in the example:
 - first name,
 - last name,
 - birth year,
 - height (in feet and inches; e.g., 5'10").

- *Note: You will need to get feet and inches for height separately.*

2. Subsequently,

- approximates the user's age as their birth year subtracted from the current year.
- 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

Note:

- The example assumes the year is 2018, but you should use the current year.
- As stated above, your application will not provide any input prompts to the user.
- The input is expected in the exact order as shown below in the **green text below**. Note that Jon Doe is 5'10".
- Then output the results precisely as shown in the **red text below**.

Note: This is what things will look like when you are debugging and run your code in Eclipse.

```
First name: John
Last name: Doe
Birth year: 1999
Height in feet (do not include inches): 5
Height in inches (do not include feet): 10

Hello John Doe.
You are 19 years old in 2017.
Your height is 177.8 cm.
You grew an average of 6.67368 cm per year (assuming you were
51 cm at birth).
```

Note: This is what the same code generates in Mimir since it does not show the inputs which provide line breaks.

```
First name: Last name: Birth year: Height in feet (do not
include inches): Height in inches (do not include feet):
Hello John Doe.
You are 19 years old in 2018.
Your height is 177.8 cm.
You grew an average of 6.67368 cm per year (assuming you were
51 cm at birth).
```