*Your submission for this tutorial **must include your full name** and you nine-digit **student number as a comment** at the top of **every source file you submit**. All source code files must be written using the **Python 3 programming language** and must run on the course's **official virtual machine**.*

## Exercise A:    "Birthday Counter"

For this exercise you will design and implement a program that asks for the user's name, the current year, and the year in which the user was born, and then determines the possible values for that user's age. As a clarifying example, if the year was 2021 and your instructor was born in 1980, you can conclude that they must be 40 or 41 years of age, unless they were actually born on a "leap-day" (i.e., February 29), in which case their age[1] would be 10.

In order to complete this task, you will need to:

- use the "int" function to convert the input string to an integer
- determine the age calculations necessary (including a case for users born on February 29)

Your submission for this exercise:

- must be a source code file with filename[2]  'comp1405_f21_#########_tutorial_02_a.py'

## Exercise B:    "Magic Numbers"

For this exercise you will design and implement a program to perform the "phone number trick", which takes the seven (7) digits of a phone number from the user and subjects it to a series of complex calculations while still producing that same phone number as a result. Consider the sample transcript below (with user input appearing in **orange**).

```
Enter your seven-digit phone number? 5202600
Your prefix is 520. Multiply this by 80, and the result is: 41600
Add 1 to that result and multiply it by 250, and the result is: 10400250
Your line number is 2600. Add this to the previous result twice, and the result is: 10405450
Subtract 250 from that result and divide it by 2, and the result is: 5202600
```

In order to complete this task, you will need to:

- determine how to use floor division for the first three digits (or "prefix") of a phone number
- determine how to use modulation for the last four digits (or "line number") of a phone number

Your submission for this exercise:

- must take a seven-digit phone number (n.b., no "area code") with only a single call to input
- must be a source code file with filename  'comp1405_f21_#########_tutorial_02_b.py'

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[1] "Age" is operationally-defined here as the number of birthday anniversaries experienced since birth
[2] You must replace the number signs in the filename with your official nine-digit student identification number.