

Exercises: variable and function

1. The Temperature Converter

Create a function called `fahrenheitToCelsius`:

- Pass in Fahrenheit temperature as parameter
- Calculate Celsius temperature and store it into a variable.
- Output "xx°C is yy°F".

Create a function called `celsiusToFahrenheit`:

- Pass in Celsius temperature as parameter
- Calculate Fahrenheit temperature and store it into a variable.
- Output "xx°F is yy°C."

Prompt user to input a Celsius temperature and call the corresponding function; Prompt user to input a Fahrenheit temperature and call the function;

Make the converter functions based on the Formula:

$$^{\circ}\text{F to }^{\circ}\text{C} \quad ^{\circ}\text{C} = (^{\circ}\text{F} - 32) * 5/9$$

$$^{\circ}\text{C to }^{\circ}\text{F} \quad ^{\circ}\text{F} = ^{\circ}\text{C} * 9/5 + 32$$

2. The Age Calculator

Write a function named **`calculateAge`** that:

- takes 1 parameters: year of birth.
- store current year (2015) into a variable.
- calculates the age and output it to the screen.

Continue to prompt user to input a birth year, store it into a variable. Then call the function to show the calculated age.

When user inputs an empty string (nothing), stop the program.

Advanced: search on MDN for how to get the current year programmatically; replace the hard code of current year (2015).

3. The Story Teller

- Create a function named `student`. The function takes the arguments of name, year of birth, and Seneca ID (not student number, ie: jsmith). The function will return a string like: "[student] is [XX] years old. Seneca email: [stuID]@myseneca.ca"
- Prompt user to name, year of birth, and Seneca ID; then store them into variables.
- Call the function with inputted data and show student info on screen.
- Note: you can use the function created in question #2.

4. The Area Calculator

Write a function named **circle** that takes radius as parameter. The function calculates the area and circumference based on the radius and output them on screen.

Notes: make sure that different approaches of defining function are used.