FUNCTIONS

- **Q1.** Write a function that takes first & last name and then it greets the user using his full name.
- **Q2.** Write a function that adds two numbers (input by user) and returns the sum of two numbers.
- Q3. Calculator:

Write a function that takes three arguments num1, num2 & operator & compute the desired operation. Return and show the desired result in your screen.

- **Q4.** Write a function that squares its argument.
- **Q5.** Write a function that computes factorial of a number.
- **Q6.** Write a function that take start and end number as inputs & display counting in your screen.
- **Q7.** Write a function that computes hypotenuse of a right angle triangle by following the steps given below.

Hypotenuse² = Base² + Perpendicular²

- a) Take base and perpendicular as inputs.
- b) Create a function calculateSquare() for calculating and returning square of a number.
- c) Create a function calculateHypotenuse() for calculating hypotenuse of a right angle triangle. Make use of the calculateSquare() function.
- **Q8.** Write a function that calculates the area of a rectangle.

A = width * height

Pass width and height in following manner:

- a) Arguments as values
- b) Arguments as variables
- **Q9.** Write a function that computes power of a number. E.g. 2³ is 8.
- **Q10.** Write a function which accepts an argument and returns the type.

Q11. The Age Calculator

Forgot how old you are? Calculate it!

- a) Write a function named calculateAge that:
 - o Takes 2 arguments: birth year, current year.
 - o Calculates the 2 possible ages based on those years.
 - o Outputs the result to the screen like so: "You are either NN or NN"
- b) Call the function three times with different sets of values.

The Age Calculator

Current Year : 2015 Birth Year : 1994

They are either 21 or 22 years old

The Age Calculator

Current Year : 2015 Birth Year : 1997

They are either 18 or 19 years old

Q12. The Temperature Converter

It's hot out! Let's make a converter based on the steps here.

- a) Create a function called celsiusToFahrenheit:
 - o Store a celsius temperature into a variable.
 - o Convert it to fahrenheit and output "NN°C is NN°F".
- b) Create a function called fahrenheitToCelsius:
 - o Now store a fahrenheit temperature into a variable.
 - o Convert it to celsius and output "NN°F is NN°C."

Q13. The Lifetime Supply Calculator

Ever wonder how much a "lifetime supply" of your favorite snack is? Wonder no more!

- a) Write a function named calculateSupply that:
 - o Takes 2 arguments: age, amount per day.
 - Calculates the amount consumed for rest of the life (based on a constant max age).
 - Outputs the result to the screen like so: "You will need NN to last you until the ripe old age of X"
- b) Call that function three times, passing in different values each time.

The Lifetime Supply Calculator

Favorite Snack: Oreo biscuits

Current Age: 15

Estimated Maximum Age: 85 Amount of snacks per day: 2

You will need 140 Oreo biscuits to last you until the ripe old age of 85

The Lifetime Supply Calculator

Favorite Snack: Oreo biscuits

Current Age: 20

Estimated Maximum Age: 85 Amount of snacks per day: 2.5

You will need 162 Oreo biscuits to last you until the ripe old age of 85

Q14. The Geometrizer

Create 2 functions that calculate properties of a circle, using the definitions here.

- a) Create a function called calcCircumference:
 - Pass the radius to the function.
 - Calculate the circumference based on the radius, and output "The circumference is NN".
- b) Create a function called calcArea:
 - o Pass the radius to the function.
 - o Calculate the area based on the radius, and output "The area is NN".