1. The weight of anything on the moon is approximately one-sixth its weight on earth. So, a person who weighs 60 kg on earth would weigh 10 kg on the moon. Write a **function calcMoonWeight** that takes an earth weight as its parameter, converts it to moon weight, and returns the moon weight

2. Complete this function to convert the inputted **feet** value to meters and **return** the result. Conversion units: **39.37 inches = 1 meter**. Call the function, saving the return value to a variable. Log the variable.

```
function convertFeetToMeters(feet) {
    // convert feet to meters
}
```

3. . Make a function called **squareNum** that:

   - takes in one number as its input
   - squares that number and returns the result So, if you input 4, it logs 16. Run the function three times with different inputs.

4. Make a function that:

   - takes TWO positive integers as its inputs (arguments)
   - raises the first number to the power of the second number
   - returns the answer So, if you input (5, 3), you get back 125. Run the function three times with different inputs.

5. Make another version of the previous function that:

   - takes one number as its input (argument)
   - if the number is even, it squares the number
   - but if the number is odd, it cubes the number
   - returns the answer. So, if you input 3, you get back 27. So, if you input 4, you get back 16. Run the function three times with different values.

6. Declare a function called **introducePet**, that:

   - has four parameters: **pet**, **name**, **age** and **sound**
   - returns a message, such that if the arguments are **cat**, **Fluffy**, **3** and **Meow**, the returned message is: **Meow! My name is Fluffy! I am a 3-year-old cat!**. Run the function three times, with different pet inputs each time.

7. Declare a function with two parameters, **num1** and **num2**. The function call passes in two arguments, both numbers.
   The function does the following math:

   - If the **num1** is greater than **num2**, subtract **num2** from **num1**
   - If **num1** is less than or equal to **num2**, add the numbers together.
     Return the answer. Run the function twice, once with the numbers being subtracted, the other with the numbers being added.

8. Given: two sides of a right triangle as global variables **sideA** and **sideB**

- Write a function with parameters **a** and **b**
  - Function uses the Pythagorean Theorem (**a² + b² = c²**) to find the hypotenuse, **c**, of **a** and **b**.
  - Function returns **c**, the hyotenuse.
  - Call the function, passing in **sideA** and **sideB** as its two arguments.

9. Write a function that:

- takes in numbers of pennies, nickels, dimes and quarters
- calculates the total value of all coins
- returns the total as dollars and cents, to two decimal places and with dollar-sign

10. Define a function that:

- takes the radius of a circle as its input
- calculates the area of the circle using the formula `A = πr2`
- returns the area

Call the function, passing in `radius` as its argument. Set the function call equal to a variable to save the return value.

END Lab 03.01
SEE Lab 03.01 Solution