



## WEEKEND SNACK: FUNCTIONS

1. **isEven(integer) -> boolean:** Write a function that takes an integer and returns **true** if the integer is even and returns **false** if the integer is odd.
2. **isPrimeNumber(integer)-> boolean:** Write a function that takes an integer and returns **true** if the number is a prime number and returns **false** if it is not a prime number.
3. **subtract(integer, integer)-> integer:** Write a function that takes 2 integers and returns the **positive difference** irrespective of the parameter order. ie 3, 7 and 7, 3 should return 4.
4. **divide(integer, integer)-> float:** Write a function that takes 2 integers and returns the **quotient**. If the second integer is 0 (zero). **please return 0 as your quotient**.
5. **factorOf(integer)-> integer:** Write a function that takes an integer and returns the **number of factor for the integer**. ie, if the function takes in 10, it should return 4 because factors of 10 are 1,2,5,10.
6. **isSquare(integer)->boolean:** Write a function that takes an integer and returns **true** if the integer is a square number. ie if I pass in 25, the function should return true.
7. **isPalindrome(integer)->boolean:** Write a function that takes an 5 digit integer and returns **true** if it is a palindrome. ie if I pass in 54145, it should return true.
8. **factorialOf(integer)-> long:** Write a function that takes an integer and returns the **factorial of the number**. If I pass in 5, i expect 120 ( $5 * 4 * 3 * 2 * 1$ ).
9. **squareOf(integer) -> long:** Write a function that takes an integer and returns the **square of the number**. if I pass in 5, i expect 25( $5 * 5$ ).

You can google the mathematics terms used in this assignment to gain clarity before doing the tasks.

Create a class called **Kata** and create all of the functions in the class.

**Submission instruction:** push the code alongside your existing code to github and add me as a contributor (my handle is *i-am-chibuzo*).

**PS: This snack is not a group snack, DO NOT SHARE.**

*Enjoy your short weekend*