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# *Python Assignment 10*

## *Python Basics:*

### *Code Reuse - Functions*

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#### Class Recap

When we do math, we have to repeat the same steps to solve a particular problem every time. For example, it takes multiple steps to find LCM (Least Common Multiple) of 2 integers. How much we wish we can pack all those steps together and simply wave a magic wand to repeat them next time we need to find LCM.

In programming, you can! It's called a function. You can pack all those steps inside a function and simply call that function by the name next time you need to use those steps to solve that particular problem.

Function is all about code reuse. You write code once to do something useful and pack them inside a function. You can use that function as many times as you need in your code. Even better, you can package those functions inside a module so someone else can use those functions (by installing and importing the module into their code).

## Assignment 1:

In the Python Mini Project, you wrote code to solve multiple problems. Refactor(re-write) your code into several functions and solve problems by calling those functions:

- 1) A function to find all factors of a given integer, return those factors in a list
- 2) A function to determine if a given integer is a prime number
- 3) A function to find GCF of 2 integers