Functions in Python

Outlines

- What is function?
- Problem

What is function?

Function is a block of code that performs a specific task. Functions take something as an input and perform some task and get something back as an output. Functions make your code more readable.

Problem

You are given two lists of numbers and you need to find total of each of these list.

In [33]:
```python
# calculate Tom expenses with for loop
tom_exp_list = [2100,3400,3500]
joe_exp_list = [200,500,700]
total = 0

for item in tom_exp_list:
    total=total+item
print("Tom's total expenses: ",total)
```

```
Tom's total expenses:  9000
```

```
In [35]: # calculate Joe expenses with for loop
         tom_exp_list = [2100,3400,3500]
         joe_exp_list = [200,500,700]
         total = 0

         for item in joe_exp_list:
             total=total+item
         print("Joe's total expenses: ",total)
```

Joe's total expenses: 1400

The problem of this method is that you should repeat three lines of for loop whenever you want to calculate the total expenses.

```
In [36]: def calculate_total(exp):
             total = 0
             for item in exp:
                 total = total + item
             return total

         tom_exp_list = [2100,3400,3500]
         joe_exp_list = [200,500,700]
```

```
In [37]: calculate_total(tom_exp_list)
```

Out[37]: 9000

```
In [38]: calculate_total(joe_exp_list)
```

Out[38]: 1400

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