Typically a python script or notebook contains several functions interacting with each other

Functions often use results from other functions, lets see a simple example threough a guessing game.

There will be 3 positions in the list, one of which is an 'O', a function will shuffle the list, another will take a players guess, and finally anothert will check to see if it is correct.

This is based on the classic carnival game of guessing which cup a red ball is under.

OK, lets create our simple game

In [1]:
```
example = [1,2,3,4,5,6,7]
```

In [2]:
```
from random import shuffle
```

In [3]:
```
result = shuffle(example)
```

In [4]:
```
result
```

In [7]:
```
def shuffle_list(mylist):
    shuffle(mylist)
    return mylist
```

In [8]:
```
result = shuffle_list(example)
```

In [9]:
```
result
```

Out[9]:
```
[1, 3, 2, 6, 5, 4, 7]
```

In [11]:
```
mylist = ['','O','']
```

In [12]:
```
shuffle_list(mylist)
```

Out[12]:
```
['O', '', '']
```

In [13]:
```
def player_guess():

    guess= ''

    while guess not in ['0','1','2']:
        guess = input("Pick a number: 0,1 or 2")

    return int(guess)
```

In [15]:
```
player_guess()
```


,1 or 28

```
Pick a number: 0,1 or 21
```

Out[15]:
```
1
```

In [16]:
```
myindex = player_guess()
```

```
Pick a number: 0,1 or 22
```

In [17]:
```
myindex
```

Out[17]:
```
2
```

We now need to see if the guess was correct or not

In [22]:
```
def check_guess(mylist,guess):
    if mylist[guess] == 'O':
        print("Correct!")
    else:
        print("Wrong Guess!")
        print(mylist)
```

In [24]:
```
# INITIAL LIST
mylist = ['','O','']

# SHUFFLE LIST
mixedup_list = shuffle_list(mylist)

# USER GUESS
guess = player_guess()

#CHECK GUESS
check_guess(mixedup_list,guess)
```

```
Pick a number: 0,1 or 21
Correct!
```

In [ ]:
```

```