

# Exercises

**Resource Name:** The Quick Python Book 3<sup>rd</sup> Edition

**Chapter:** #9

**Step:** #3

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## **QUICK CHECK: FUNCTIONS AND PARAMETERS**

```
def number(*params):  
    for i in reversed(params):  
        print(i)  
number(114,115,116)
```

- 1) We can use no return stuff.
- 2) Use the specific value

### **QUICK CHECK: MUTABLE FUNCTION PARAMETERS**

- 1) All of the changes will be saved.
- 2) + and – (append and remove methods)
- 3) Not using mutable types for these parameters.

### **TRY THIS: GLOBAL VS LOCAL VARIABLES**

- 1) x won't change.
- 2) The global variable x will be 2.

## QUICK CHECK: GENERATOR FUNCTIONS

```
def four(limit):  
    x = 0  
    while x < limit:  
        print("in generator, x =", x)  
        yield x  
        x += 1
```

```
for i in four(4):  
    print(i)
```

```
def four(start, limit):  
    x = start  
    while x < limit:  
        print('in generator, x =', x)  
        yield x  
        x += 1
```

```
for i in four(1, 4):  
    print(i)
```

## **TRY THIS: DECORATORS**

```
def dec(my_func):
    def my_func1(*args):
        def my_func2(*args):
            value = my_func(*args)
            return "<html>{ }<html>".format(value)

        return my_func2(*args)
    return my_func1

@dec
def myfunction(param):
    return param

print(myfunction('hello'))
```

## LAB 9: USEFUL FUNCTIONS

```
punctuations = str.maketrans("", "", "!.,:;-?")
```

```
def clean_line(line):
```

```
    cl = line.lower()
```

```
    cl = cl.translate(punctuations)
    return cl
```

```
def my_word(line):
```

```
    words = line.split()
```

```
    return '\n'.join(words) + '\n'
```

```
with open('moby_01.txt') as file_1, open('moby_01_clean.txt', 'w')
    as file_2:
```

```
    for line in file_1:
```

```
        cl = line_removed(line)
```

```
        cw = my_word(cl)
```

```
        file_2.write(cw)
```

```
def count_3(words):
```

```
    count_1 = { }
```

```
    for word in moby_words:
```

```
        count = word_count.setdefault(word, 0)
```

```
        count_1[word] += 1
```

```
    return count_1
```

```
def temp(count_1):
```

```
    list_1 = list(count_1.items())
```

```
    list_1.sort(key = lambda x: x[1])
```

```
    least_common = list_1[:5]
```

```
    most_common = list_1[-1:-6:-1]
```

```
    return most_common, least_common
```

```
moby_words = []
with open('moby_01_clean.txt') as file_1:
    for word in file_1:
        if word.strip():
            moby_words.append(word.strip())

count_1 = count_3(moby_words)

mc, lc = temp(count_1)
print('The most common words are:')

for word in mc:
    print(word)
print('The least common words are:')

for word in lc:
    print(word)
```