

## Practice sheet by Percy Teng <3

### 1. Variables and Lists

- a. `>>>Str_1 = 'hello'`  
`>>>Str_2 = str_1[1]`  
`>>>Str_2`  
`>>> _____`  
`>>>Str_1[1] = 'joke'`  
`>>> _____`  
`>>>str_2*3`  
`>>> _____`  
`>>>str_1 + str_2`  
  
`>>>int_1 = 1`  
`>>>float_1 = 1.1`  
`>>>int_1 + float_1`  
`>>> _____`  
  
`>>> bool_1 = True`  
`>>>bool_2 = False`  
`>>>bool_1 and bool_2`  
`>>> _____`  
`>>>bool_1 or bool_2`  
`>>> _____`  
`>>>bool_2 or bool_1`  
`>>> _____`
- b. `lis_1 = ['hello', 'world', 'coding', 'with', 'percy']`  
`lis_2 = lis_1`  
`lis_2.append('good stuff')`  
`lis_1 = _____`  
`lis_1[2] = _____`  
`lis_1.remove('world')`  
`lis_1 = _____`  
`lis_1 + 'Lie'`  
  
`_____`  
`lis_1 + lis_2*2 = _____`
- c. `a = 5`  
`b = 6`  
swap the value of a and b.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## 2. Arithmetic problems:

- a.  $12 / 5 =$  \_\_\_\_\_
- b.  $12 // 5 =$  \_\_\_\_\_
- c.  $7 \% 2 =$  \_\_\_\_\_
- d.  $3 ** 4 =$  \_\_\_\_\_

## 3. Built in function

- a. `>>>print('hola')`  
`>>>_____`  
`>>>max(1,2,3,4,5)`  
`>>>_____`  
`>>>max(1)`  
`>>>_____`

`>>>pow(2,3)`  
`>>>_____`  
`>>>pow(3)`  
`>>>_____`  
`>>>pow(5,2,4)`  
`>>>_____`

`>>>abs(-2)`  
`>>>_____`  
`>>>abs(3)`  
`>>>_____`  
`>>>abs(0)`  
`>>>_____`

`>>>round(3.4999)`  
`>>>_____`  
`>>>round(4.5)`  
`>>>_____`

## 4. functions

```
def avg(num1, num2):  
    """
```

```
    """
```

```
    return (num1 + num2)/2
```

```
def double_average(first_number, second_number):
```

```
    """(int, int) -> float
```

```
    return the double value of the average of first_number and second_number
```

```
>>>double_average(3,5)
```

```
8.0
```

```
>>>double_average(3,0)
```

```
3.0
```

```
"""
```

Nested Function Order practice:

```
avg(avg(5,7), double_average(6,8))
```