



Lab Week 6

List

1. Write a Python script that turn every item of a list into its square. Given a list of numbers that turn every item of a list into its square.

Given:

```
numbers = [1, 2, 3, 4, 5, 6, 7]
```

Expected output:

```
[1, 4, 9, 16, 25, 36, 49]
```

2. Write a Python script that concatenate two lists in the following order.

Given:

```
first_name = ["Jason", "Hillary"]  
second_name = ["Derulo", "Duff"]
```

Expected output:

```
['Jason Derulo', 'Jason Duff', 'Hillary Derulo', 'Hillary Duff']
```

Tuple

3. Write a Python script. that access the value 20 from the tuple. The tuple is a nested list.

Given:

```
my_tuple = ("Orange", [10, 20, 30], (5, 15, 25))
```

Expected output:

```
20
```



Dictionaries

4. Write a Python script to concatenate following dictionaries to create a new one.

```
1
2 Sample dictionary:
3
4 dict_1 = {1:10, 2:20}
5 dict_2 = {3:30, 4:40}
6 dict_3 = {5:50, 6:60}
7
8 Expected Result:
9 {1:10, 2:20, 3:30, 4:40, 5:50, 6:60}
10
```

5. Write a Python script to print a dictionary where keys are numbers between 1 and 15 (both included) and the values are square of keys.

```
1
2 Sample dictionary:
3
4 {1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81,
5 10: 100, 11: 121, 12: 144, 13: 169, 14: 196, 15: 225}
6
```

6. Write a Python program to remove a specified dictionary from a given list.

```
1
2 Original list of dictionary:
3
4 [{'id': '#FF0000', 'color': 'Red'},
5 {'id': '#800000', 'color': 'Maroon'},
6 {'id': '#FFFF00', 'color': 'Yellow'},
7 {'id': '#808000', 'color': 'Olive'}]
8
9 Remove id "#FF0000" from the said list of dictionary:
10
11 New list of dictionary:
12 [{'id': '#800000', 'color': 'Maroon'},
13 {'id': '#FFFF00', 'color': 'Yellow'},
14 {'id': '#808000', 'color': 'Olive'}]
15
```

Sets

7. Write a Python program that create an empty set. Then, ask the user for input to add into the set.