

BAF515 금공프3 Quiz 2

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1.

1. Create a dictionary 'icecream' with [price, inventory] for each ice cream item by the following code.

```
icecream={'cheery': [12,100], 'cookies': [18,200], 'greentea': [15,140], 'mango': [10,200]}
```

(1) Change the price of 'cookies' as 13.

(2) Add the following information to the dictionary 'icecream'.

- 'Strawberry' is priced at 12 and inventory is 170.
- 'pistachio' is priced at 15 and inventory is 100.

```
In [ ]: icecream = {  
    'cheery': [12, 100], # price, inventory  
    'cookies': [18, 200],  
    'greentea': [15, 140],  
    'mango': [10, 200],  
}
```

(1)

```
In [ ]: icecream['cookies'][0] = 13
icecream
```

```
Out[ ]: {'cheery': [12, 100],
        'cookies': [13, 200],
        'greentea': [15, 140],
        'mango': [10, 200]}
```

(2)

```
In [ ]: icecream['Strawberry'] = [12, 170]
icecream['pistachio'] = [15, 100]
icecream
```

```
Out[ ]: {'cheery': [12, 100],
        'cookies': [13, 200],
        'greentea': [15, 140],
        'mango': [10, 200],
        'Strawberry': [12, 170],
        'pistachio': [15, 100]}
```

2.

2. Create 'd1' and 'd2' by the following code.

```
d1={'key1': 1, 'key2': 3, 'key3': 2, 'key10': 7 }  
d2={'key3': 1, 'key2': 2, 'key7': 2, 'key5': 4, 'key1': 7, 'key9': 8, 'key0': 7}
```

- (1) Select the largest two values of the dictionary 'd2'.
- (2) Create a set of values which are the unique values of 'd2'.
- (3) Write code that returns True if keys of 'd1' are all contained in the key of 'd2' and False otherwise.
- (4) Create a set of values which are common in both 'd1' and 'd2'.

```
In [ ]: d1 = {  
    'key1': 1,  
    'key2': 3,  
    'key3': 2,  
    'key10': 7,  
}  
  
d2 = {  
    'key3': 1,  
    'key2': 2,  
    'key7': 2,  
    'key5': 4,  
    'key1': 7,  
    'key9': 8,  
    'key0': 7,  
}
```

(1)In []: `sorted(list(d2.values()))[-2:]`Out[]: `[7, 8]`**(2)**In []: `set(d2.values())`Out[]: `{1, 2, 4, 7, 8}`**(3)**In []:

```
if set(d1.keys()) <= set(d2.keys()):
    print('True')
else:
    print('False')
```

False

(4)In []: `set(d1.values()) & set(d2.values())`Out[]: `{1, 2, 7}`**3.**

3. For any arbitrary string object A, if the first character of A is '#', we want it to be replaced with '*'. Otherwise, we want to add '*' as the first character of A. Write appropriate code using an if statement for this.

```
In [ ]: A = input('Arbitrary String:')  
A
```

```
Out[ ]: '##foo**'
```

```
In [ ]: if A.startswith('#'):  
        A = '*' + A[1:]  
else:  
        A = '*' + A  
  
A
```

```
Out[ ]: '***#foo**'
```

4.

4. Calculate the following by using 'for' loop.

$$\sum_{i=1}^{10} i^4$$

```
In [ ]: n = 10

        summation = 0
        for i in range(1, n+1):
            summation += i**4

        summation
```

```
Out[ ]: 25333
```