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'.

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

Out[ ]: '##foo**'

In [ ]:
```python
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 [ ]:
```python
n = 10

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

summation
```

Out[ ]: 25333