

PYTHON DICTIONARY PRACTICE

Write a Python program to sort (ascending and descending) a dictionary by value.

Sample Solution:-

Python Code:

```
import operator

d = {1: 2, 3: 4, 4: 3, 2: 1, 0: 0}

print('Original dictionary : ',d)

sorted_d = sorted(d.items(), key=operator.itemgetter(0))

print('Dictionary in ascending order by value : ',sorted_d)

sorted_d = sorted(d.items(), key=operator.itemgetter(0),reverse=True)

print('Dictionary in descending order by value : ',sorted_d)
```

Sample Output:

```
Original dictionary : {0: 0, 1: 2, 2: 1, 3: 4, 4: 3}
Dictionary in ascending order by value : [(0, 0), (1, 2), (2, 1), (3, 4), (4, 3)]
Dictionary in descending order by value : [(4, 3), (3, 4), (2, 1), (1, 2), (0, 0)]
```

Write a Python script to generate and print a dictionary that contains a number (between 1 and n) in the form (x, x*x).

Sample Solution:-

Python Code:

```
n=int(input("Input a number "))

d = dict()
```

```
for x in range(1,n+1):  
    d[x]=x*x  
  
print(d)
```

Sample Output:

```
10  
{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81, 10:  
100}
```

Sample Solution:-

Python Code:

```
from collections import Counter  
  
d1 = {'a': 100, 'b': 200, 'c':300}  
d2 = {'a': 300, 'b': 200, 'd':400}  
  
d = Counter(d1) + Counter(d2)  
  
print(d)
```

Sample Output:

```
Counter({'b': 400, 'd': 400, 'a': 400, 'c': 300})
```

Python Code Editor: