

Day - 11

Dictionary

It is used to store data in keys.

It is ~~ordered~~, ~~changeable~~ and allow duplicate value in values only.

Example.

```
this dict = {  
    'brand': 'Ford',  
    'model': 'mustang',  
    'year': 1964  
}
```

```
print(this dict) → {'brand': 'Ford', 'model': 'mustang',  
                    'year': 1964}
```

Get value Access item.

```
print(this dict['brand'])  
↳ mustang
```

Duplicate value

```
this dict = {  
    'brand': 'Ford',  
    'model': 'mustang',  
    'year': 1942,  
    'year': 2020 }.
```

```
print(this dict)
```

```
↳ {'brand': 'Ford', 'model': 'mustang', 'year': 2020}
```

this will be print last value

only

```
print(len(dict)) = 3
```

↳ duplicate value could not take a count.

Get value.

```
x = thisdict.get('model')
```

```
print(x).
```

```
↳ 'mustang'
```

get keys

∴ should be mention 'keys'

```
x = thisdict.get('key keys')
```

```
↳ print(x).
```

```
↳ ['brand', 'model', 'year']
```

add new item

```
car = { 'brand': 'Ford',  
        'model': 'mustang',  
        'year': 2020 }
```

```
car['color'] = 'red'
```

```
print(car) → { 'brand': 'Ford', 'model': 'mustang',  
               'year': 2020, 'color': 'red' }
```

Get values

```
⇒ x = thisdict.values()
```

```
print(x)
```

```
↳ ['Ford', 'mustang', 2020]
```


Get items

this key will be used to change like a tuple in a list

```
thisdict = {'brand': 'ford',  
            'model': 'mustang',  
            'year': 1990}
```

```
z = thisdict.items()
```

```
print(z)
```

↳ [('brand', 'ford'), ('model', 'mustang'), ('year', 1990)]

if key

```
if 'model' in thisdict:
```

```
    print (yes, 'model' is one of the  
           dictionary).
```

two methods of update value

```
thisdict['year'] = 2022
```

```
print (thisdict)
```

↳ {'brand': 'ford',
 'model': 'mustang',
 'year': 2022}

↳ here updated the value.

~~thisdict~~ ↳ here bracket is very important
thisdict.update({'year': '2000'})

```
print (thisdict)
```

↳ {'brand': 'ford', 'model': 'mustang', 'year': 2000}

Remove Items

thisdict.pop('model')

print(~~thisdict~~ thisdict).

↳ {'brand': 'ford', 'year': 2022}.

popitem()

↳ method removes the last inserted item.

thisdict = {'brand': 'ford',
 'model': 'mustang'

 'year': 2021

 'colour': 'white' }

thisdict.popitem()

↳ print(thisdict)

↳ {'brand': 'ford', 'model': 'mustang', 'year': 2021}

∴ here last item will be removed automatically.

del. method.

del thisdict['model']

print(~~thisdict~~ thisdict)

↳ {'brand': 'ford', 'year': 2021}.

clear

thisdict.clear()

print(thisdict)

↳ {}.

Loop through Dictionary.

↳ for method.

Print all keys in one by one.


```
thisdict = {'Brand': 'ford',  
            'Year': 2021,  
            'Colour': 'white'}
```

for x in thisdict:

print(x)

↳ Brand

Year

Colour

Print all values in dictionary

for x in thisdict:

print(thisdict[x])

↳ ford

2021

White

∴ here got all values in dictionary.

Next method to get values.

for x in thisdict.values():

print(x)

↳ ford

2021

White

to get the key values

for x in thisdict.keys():

print(x)

Brand

Year

Colour

get both keys and values.

for x, y in thisdict.items():

print(x, y)

↳ Brand ford

Year 2021

Colour White



EXPLORER

> DESKTOP

▼ OUTLINE

- thisdict
- dict
- x
- V
- y
- z
- Z

excercise.py

day11_practice.py ×

example.py 1



vs code > day11_practice.py > ...

```
1 thisdict= {'brand':'ford',
2           'model':'mustang',
3           'year':1990}
4 print(thisdict)
5 print(thisdict['model'])
6 #duplicate values
7 dict={'brand':'ford',
8       'model':'mutang',
9       'year':2019,
10      'year':2017,
11      'place':'chennai'}
12 print(dict)
13 print(len(dict))
14 #get keys and values
15 x=thisdict.get('year')
16 print(x)
17 x=dict.keys()
18 print(x)
19 V=dict.values()
20 print(V)
21 #add new value
22 thisdict['colour']='red'
23 print(thisdict)
```



PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL

```
PS C:\Users\abinaya\Desktop> & "C:/Program Files/Python310/python.exe" "c:/Users/abinaya/Desktop/vs code/day11_practice.py"
{'brand': 'ford', 'model': 'mustang', 'year': 1990}
mustang
{'brand': 'ford', 'model': 'mutang', 'year': 2017, 'place': 'chennai'}
4
1990
dict_keys(['brand', 'model', 'year', 'place'])
dict_values(['ford', 'mutang', 2017, 'chennai'])
```



- powershell
- Python
- Python
- Python
- Python



EXPLORER

> DESKTOP

OUTLINE

- thisdict
- dict
- x
- V
- y
- z
- Z

excrsice.py

day11_practice.py X

example.py 1



vs code > day11_practice.py > ...

```
20 print(V)
21 #add new value
22 thisdict['colour']='red'
23 print(thisdict)
24 y=thisdict.keys()
25 print(y)
26 z=thisdict.values()
27 print(z)
28 #using items
29 Z=thisdict.items()
30 print(Z)
31 dict['year']=2022
32 print(dict)
33 thisdict.update({'brand':'honda'})
34 print(thisdict)
35 #remove items
36 thisdict.pop('model')
37 print(thisdict)
38
39
40
41
```



PROBLEMS

1

OUTPUT

DEBUG CONSOLE

TERMINAL

```
dict_values(['ford', 'mutang', 2017, 'chennai'])
{'brand': 'ford', 'model': 'mustang', 'year': 1990, 'colour': 'red'}
dict_keys(['brand', 'model', 'year', 'colour'])
dict_values(['ford', 'mustang', 1990, 'red'])
dict_items([('brand', 'ford'), ('model', 'mustang'), ('year', 1990), ('colour', 'red')])
{'brand': 'ford', 'model': 'mutang', 'year': 2022, 'place': 'chennai'}
{'brand': 'honda', 'model': 'mustang', 'year': 1990, 'colour': 'red'}
{'brand': 'honda', 'year': 1990, 'colour': 'red'}
```

+ ^ x

- powershell
- Python
- Python
- Python
- Python

