

# Python Dictionary pop()

## Python Dictionary pop()

Python Dictionary `pop(key[, default])` method removes the (key, value) pair and returns the value. But if the key is not present and default is passed as argument, `pop()` returns the default value.

If default is not passed as argument, `pop()` method throws `KeyError`.

### Syntax – pop()

The syntax of `dict.pop()` is

```
dict.pop(key[, default])
```

where

**key** is used to remove the matching key:value pair.

**default** is returned if no key is found in the dictionary. **default** is optional.

### Example 1 – Python `dict.pop(key)`

In this example, we will take a dictionary, and delete a key:value pair by passing key as argument to `pop()` method.

#### Python Program

```
dictionary = {'a': 58, 'b': 61, 'c': 39}
value = dictionary.pop('b')
print(value)
print(dictionary)
```

#### Program Output

```
61
{'a': 58, 'c': 39}
```

The key 'b' we passed as argument to `pop()` method, is present. Therefore, `pop()` returned the value, and removed the key:value pair from the dictionary.

### Example 2 – Python `dict.pop(key, default)`

In this example, we will take a dictionary, and delete a key:value pair by passing key as argument to `pop()` method. But the key we are trying to pop is not present in the dictionary.

### Python Program

```
dictionary = {'a': 58, 'b': 61, 'c': 39}
value = dictionary.pop('k', 0)
print(value)
print(dictionary)
```

### Program Output

```
0
{'a': 58, 'b': 61, 'c': 39}
```

The key 'k' we passed as argument to pop() method, is not present in the dictionary. Therefore, pop() returned the default value that we passed as second argument. And the dictionary remains unchanged.

## Example 3 – Python dict.pop(key)

In this example, we will try to delete a key:value pair that is not present in the dictionary. Also, we are not passing the default value to the pop() method.

### Python Program

```
dictionary = {'a': 58, 'b': 61, 'c': 39}
value = dictionary.pop('k')
print(value)
print(dictionary)
```

### Program Output

```
Traceback (most recent call last):
  File "d:/workspace/python/example.py", line 2, in <module>
    value = dictionary.pop('k')
KeyError: 'k'
```

The key 'k' we passed as argument to pop() method, is not present. Also, as we have not passed the default value, pop() method raised KeyError.

## Conclusion

In this [Python Tutorial](#), we learned about Python Dictionary method dict.pop(). We have gone through the syntax of pop(), and its usage with example programs based on different parameter values.

## Python Programming

» [Python Tutorial](#)

» [Install Python](#)

» [Install Anaconda Python](#)

» [Python HelloWorld Program](#)

» [Python Variables](#)

» [Python Variable Data Type Conversion](#)

» [Python Comments](#)

## Control Statements

» [Python If](#)

» [Python If Else](#)

» [Python While Loop](#)

» [Python For Loop](#)

## Python String

» [Python String Methods](#)

» [Python String Length](#)

» [Python String Replace](#)

» [Python Split String](#)

» [Python Count Occurrences of Sub-String](#)

» [Python Sort List of Strings](#)

## Functions

» [Python Functions](#)

## Python Collections

» [Python List](#)

» [Python Dictionary](#)

## Advanced

» [Python Multithreading](#)

## Useful Resources

» [Python Interview Questions](#)