

# pandas.DataFrame.drop

`DataFrame.drop(labels=None, *, axis=0, index=None, columns=None, level=None, inplace=False, errors='raise')` [\[source\]](#)

Drop specified labels from rows or columns.

Remove rows or columns by specifying label names and corresponding axis, or by directly specifying index or column names. When using a multi-index, labels on different levels can be removed by specifying the level. See the [user guide](#) for more information about the now unused levels.

## Parameters:

**labels** : *single label or list-like*

Index or column labels to drop. A tuple will be used as a single label and not treated as a list-like.

**axis** : {0 or 'index', 1 or 'columns'}, default 0

Whether to drop labels from the index (0 or 'index') or columns (1 or 'columns').

**index** : *single label or list-like*

Alternative to specifying axis (`labels, axis=0` is equivalent to `index=labels`).

**columns** : *single label or list-like*

Alternative to specifying axis (`labels, axis=1` is equivalent to `columns=labels`).

**level** : *int or level name, optional*

For MultiIndex, level from which the labels will be removed.

**inplace** : *bool, default False*

If False, return a copy. Otherwise, do operation in place and return None.

**errors** : {'ignore', 'raise'}, default 'raise'

If 'ignore', suppress error and only existing labels are dropped.

[Skip to main content](#)

## DataFrame or None

Returns DataFrame or None DataFrame with the specified index or column labels removed or None if inplace=True.

### Raises:

#### KeyError

If any of the labels is not found in the selected axis.

### See also

#### [DataFrame.loc](#)

Label-location based indexer for selection by label.

#### [DataFrame.dropna](#)

Return DataFrame with labels on given axis omitted where (all or any) data are missing.

#### [DataFrame.drop\\_duplicates](#)

Return DataFrame with duplicate rows removed, optionally only considering certain columns.

#### [Series.drop](#)

Return Series with specified index labels removed.

## Examples

```
>>> df = pd.DataFrame(np.arange(12).reshape(3, 4),
...                    columns=['A', 'B', 'C', 'D'])
>>> df
   A  B  C  D
0  0  1  2  3
1  4  5  6  7
2  8  9 10 11
```

### Drop columns

```
>>> df.drop(['B', 'C'], axis=1)
   A  D
0  0  3
1  4  7
2  8 11
```

[Skip to main content](#)

```
>>> df.drop(columns=['B', 'C'])
   A  D
0  0   3
1  4   7
2  8  11
```

Drop a row by index

```
>>> df.drop([0, 1])
   A  B  C  D
2  8  9 10 11
```

Drop columns and/or rows of MultiIndex DataFrame

```
>>> midx = pd.MultiIndex(levels=[['llama', 'cow', 'falcon'],
...                             ['speed', 'weight', 'length']],
...                       codes=[[0, 0, 0, 1, 1, 1, 2, 2, 2],
...                              [0, 1, 2, 0, 1, 2, 0, 1, 2]])
>>> df = pd.DataFrame(index=midx, columns=['big', 'small'],
...                   data=[[45, 30], [200, 100], [1.5, 1], [30, 20],
...                        [250, 150], [1.5, 0.8], [320, 250],
...                        [1, 0.8], [0.3, 0.2]])
>>> df
```

		big	small
llama	speed	45.0	30.0
	weight	200.0	100.0
	length	1.5	1.0
cow	speed	30.0	20.0
	weight	250.0	150.0
	length	1.5	0.8
falcon	speed	320.0	250.0
	weight	1.0	0.8
	length	0.3	0.2

Drop a specific index combination from the MultiIndex DataFrame, i.e., drop the combination `'falcon'` and `'weight'`, which deletes only the corresponding row

```
>>> df.drop(index=('falcon', 'weight'))
```

		big	small
llama	speed	45.0	30.0
	weight	200.0	100.0
	length	1.5	1.0
cow	speed	30.0	20.0
	weight	250.0	150.0
	length	1.5	0.8

[Skip to main content](#)

```
falcon  speed  320.0  250.0
        length  0.3    0.2
```

```
>>> df.drop(index='cow', columns='small')
        big
llama  speed  45.0
      weight 200.0
      length  1.5
falcon  speed  320.0
      weight  1.0
      length  0.3
```

```
>>> df.drop(index='length', level=1)
        big  small
llama  speed  45.0  30.0
      weight 200.0 100.0
cow     speed  30.0  20.0
      weight 250.0 150.0
falcon  speed  320.0 250.0
      weight  1.0   0.8
```

< [Previous](#)  
[pandas.DataFrame.between\\_time](#)

[pandas.DataFrame.drop\\_duplicates](#) [Next](#) >