# 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 specifying directly index or column names. When using a multi-index, labels on different levels can be removed by specifying the level.

labels : single label or list-like

Index or column labels to drop.

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, columns: single label or list-like

Alternative to specifying axis (labels, axis=1 is equivalent to

columns=labels).

Parameters:

New in version 0.21.0.

level: int or level name, optional

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

inplace: bool, default False

If True, do operation inplace and return None.

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

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

Returns: dropped : pandas.DataFrame

**KeyError** 

Raises: If none of the labels are 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
             7
  4 5
        6
1
2
  8
     9
        10
            11
```

## Drop columns

```
>>> df.drop(['B', 'C'], axis=1)

A D
0 0 3
1 4 7
2 8 11
```

```
>>> 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=[['lama', '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
        speed
                 45.0
                          30.0
lama
        weight
                 200.0
                          100.0
        length 1.5
                          1.0
        speed
                 30.0
COW
                          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
```

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