

Select and Drop Entries in DataFrame

In this lesson, an explanation on how to select and drop entries in a DataFrame is provided.

We'll cover the following

- Selecting entries
 - Selection in DataFrame
- Dropping entries

Selecting entries

There are a number of different ways to select entries from a `DataFrame` object. Some have been discussed [earlier](#), and some are thoroughly explained in this lesson.

Selection in `DataFrame`

The following are some more ways to select elements in a `DataFrame`.

```
import numpy as np
import pandas as pd

df = pd.DataFrame(np.arange(16).reshape(4,4), index=['Row1', 'Row2', 'Row3', 'Row4'], columns=['Co
print("The original DataFrame\n", df)

print("\nElements which satisfy the condition:\n", df[df['Column3'] > 6])

print("\nElements of Index named Row4:\n", df.loc['Row4'])
```



- On **line 8**, the rows in which the value of `Column3` is greater than `6` are selected. The condition is specified inside the DataFrame `df` so those values can be returned for which the condition holds true.
- On **line 10**, elements from *index* named `Row4` are selected using the `loc[index_name]` operator. The `loc` operator is previously used [here](#), where the index number is provided to fetch elements

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Dropping entries

Dropping an unwanted *index* or *column* from the `DataFrame` object is also an important function. The `drop(row_index_name)` function for *index* or *row* and `drop(col_index_name, axis = 1)` function for *column* is called from the `DataFrame` object, and the desired *index* or *column* will be dropped from the `DataFrame`. The `axis = 1` parameter signifies to select a column for dropping. We can specify `axis = 0` to drop a row index, but it is already the default option for this operation.

```
import numpy as np
import pandas as pd

df = pd.DataFrame(np.arange(16).reshape(4,4), index=['Row1', 'Row2', 'Row3', 'Row4'], columns=['Co
print("The original DataFrame\n", df)

print("\nDataFrame after dropping Index Row2:\n", df.drop('Row2'))

print("\nDataFrame after dropping Column2:\n", df.drop('Column2',axis=1))
```



It can be seen from the output that **line 8** dropped `Row2` index, and **line 10** dropped column named `Column2` from the `DataFrame` object.

In the next lesson, some data manipulation functions of pandas are discussed.