

## CC: 4.1.1: Getting Started with Pandas

### Getting Started with Pandas: Question 1

1/1 point (graded)

#### What is Pandas?

Review the video at 1:20 if you need a refresher.

A Python library designed to query and manipulate annotated data tables

correct

An extension of `numpy` arrays

A classification library

#### Explanation

`pandas` is a general library for manipulating 1d and 2d arrays of data of various types.

### Getting Started with Pandas: Question 2

1/1 point (graded)

What keyword allows you to specify names to indices in a `pd.Series`?

`names`

`index`

correct

`key`

`values`

## Getting Started with Pandas: Question 3

1/1 point (graded)

In `pandas`, what does the `reindex` method do?

Renames the indices according to the argument or adds an additional index to the `pandas` Series object

Reorders the indices of a `pandas` Series object according to its argument

correct

### CC: 4.1.2: Loading and Inspecting Data

What command reads in `csv` files in `pandas`?

`pd.csv_read`

`pd.csv`

`pd.read(type="csv")`

`pd.read_csv`

Correct

### CC: 4.1.3: Exploring Correlations

Exploring Correlations: Question 1

1/1 point (graded)

How can you find a correlation matrix of a `pd.DataFrame`?

`pd.correlation_matrix`

```
pd.corr_mat
```

```
pd.DataFrame.corr  
correct
```

```
pd.correlation
```

## Exploring Correlations: Question 2

1/1 point (graded)

How can you plot a correlation matrix by color?

```
plt.color
```

```
plt.pcolor  
correct
```

```
plt.plot_corr
```

```
plt.corr
```

## Exploring Correlations: Question 3

1/1 point (graded)

What is the `matplotlib.pyplot` function that plots a colorbar on the side of a plot?

```
plt.plot(type="bar")
```

```
plt.coloredbar()
```

```
plt.bar()
```

```
plt.colorbar()
```

correct

## CC: 4.1.4: Clustering Whiskies By Flavor Profile

### Clustering Whiskies By Flavor Profile: Question 1

1/1 point (graded)

What is spectral co-clustering?

A method for neatly plotting clustered data

A method for finding clusters of objects by the similarity of their attributes

correct

A method for finding the spectrum of a distribution

### Clustering Whiskies By Flavor Profile: Question 2

1/1 point (graded)

How many clusters do we find in the whisky dataset used in Video 4.1.4?

4

5

6

correct

7

## CC: 4.1.5: Comparing Correlation Matrices

### Comparing Correlation Matrices: Question 1

1/1 point (graded)

Consider the following code:

```
import pandas as pd
data = pd.Series([1,2,3,4])
data = data.ix[[3,0,1,2]]
```

What does `data[0]` return? Why?

1: `data.ix` alters the order of appearance, but leaves the indices the same.

correct

2: `data.ix` reorders the indices according to the argument.

3: `data.ix` resets the Series to the values given as the argument.

4: The 0th index of the data has been reordered to correspond to index 3 of the original, which is 4.

This code contains an error.

### Comparing Correlation Matrices: Question 2

1/1 point (graded)

Consider the following code:

```
import pandas as pd
data = pd.Series([1,2,3,4])
data = data.ix[[3,0,1,2]]
data = data.reset_index(drop=True)
```

What does `data[0]` return? Why?

1: `data.reset_index` resets the order of appearance, altering the indices to the original.

2: `data.reset_index` reorders the indices according to the `data.ix` argument.

3: `data.reset_index` resets the Series to the values given in the `data.ix` argument.

4: The 0th index of the data has been reordered to index 3 of the original, which is 4.  
correct

This code contains an error.