This notebook is an exercise in the Pandas course. You can reference the tutorial at this link.

Introduction

Run the following cell to load your data and some utility functions.

In [ ]:
```
import pandas as pd

reviews = pd.read_csv("../input/wine-reviews/winemag-data-130k-v2.csv",
index_col=0)

from learntools.core import binder; binder.bind(globals())
from learntools.pandas.data_types_and_missing_data import *
print("Setup complete.")
```

Exercises

1.

What is the data type of the `points` column in the dataset?

In [ ]:
```
# Your code here
dtype = reviews.points.dtype

# Check your answer
q1.check()
```

In [ ]:
```
#q1.hint()
#q1.solution()
```

2.

Create a Series from entries in the `points` column, but convert the entries to strings. Hint: strings are `str` in native Python.

In [ ]:
```
point_strings = reviews.points.astype("str")

# Check your answer
q2.check()
```

In [ ]:
```
#q2.hint()
#q2.solution()
```

3.

Sometimes the price column is null. How many reviews in the dataset are missing a price?

In [ ]:
```
n_missing_prices= missing_price_reviews = reviews[reviews.price.isnull
()]
n_missing_prices = len(missing_price_reviews)
# Cute alternative solution: if we sum a boolean series, True is treate
d as 1 and False as 0
n_missing_prices = reviews.price.isnull().sum()
# or equivalently:
n_missing_prices = pd.isnull(reviews.price).sum()
# Check your answer
q3.check()
```

In [ ]:
```
#q3.hint()
#q3.solution()
```

4.

What are the most common wine-producing regions? Create a Series counting the number of times each value occurs in the `region_1` field. This field is often missing data, so replace missing values with `Unknown`. Sort in descending order. Your output should look something like this:

```
Unknown                    21247
Napa Valley                 4480
                           ...
Bardolino Superiore            1
Primitivo del Tarantino        1
Name: region_1, Length: 1230, dtype: int64
```

In [ ]:
```
reviews_per_region = reviews.region_1.fillna('Unknown').value_counts().
sort_values(ascending=False)
# Check your answer
q4.check()
```

In [ ]:
```
#q4.hint()
#q4.solution()
```

Keep going

Move on to **renaming and combining**.

Have questions or comments? Visit the Learn Discussion forum to chat with other Learners.