

This notebook is an exercise in the **Pandas** (<https://www.kaggle.com/learn/pandas>) course. You can reference the tutorial at [this link](https://www.kaggle.com/residentmario/data-types-and-missing-values) (<https://www.kaggle.com/residentmario/data-types-and-missing-values>).

Introduction

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

```
In [1]: 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.")
```

Setup complete.

Exercises

1.

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

In [3]:

```
# Your code here
dtype = reviews.points.dtype

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

Correct

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 [4]:

```
point_strings = reviews.points.astype('str')

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

Correct

In []:

```
#q2.hint()
#q2.solution()
```

3.

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

```
In [8]: n_missing_prices = pd.isnull(reviews.price).sum()

# Check your answer
q3.check()
```

Correct

```
In [10]: #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 [15]:

```
reviews_per_region = reviews.region_1.fillna("Unknown").value_counts().  
sort_values(ascending=False)  
  
# Check your answer  
q4.check()
```

Correct

In [16]:

```
#q4.hint()  
#q4.solution()
```

Keep going

Move on to **renaming and combining** (<https://www.kaggle.com/residentmario/renaming-and-combining>).

Have questions or comments? Visit the [Learn Discussion forum \(https://www.kaggle.com/learn-forum/161299\)](https://www.kaggle.com/learn-forum/161299) to chat with other Learners.