

Introduction

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

```
In [ ]: import sys
        from pathlib import Path
        learntools_dir = Path().absolute().parents[1]
        sys.path.append(str(learntools_dir))

        import pandas as pd

        reviews = pd.read_csv("../pandas/datasets/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 = ____

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

```
In [ ]: #_COMMENT_IF(PROD)_
        q1.hint()
        #_COMMENT_IF(PROD)_
        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 = ____

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

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

3.

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

```
In [ ]: n_missing_prices = ____

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

```
In [ ]: #_COMMENT_IF(PROD)_
        q3.hint()
        #_COMMENT_IF(PROD)_
        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_

        # Check your answer
        q4.check()
```

```
In [ ]: reviews_per_region
```

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

Keep going

Move on to [renaming and combining](#).