

Introduction

The first step in most data analytics projects is reading the data file. In this exercise, you'll create Series and DataFrame objects, both by hand and by reading data files.

Run the code cell below to load libraries you will need.

```
import pandas as pd
pd.set_option('display.max_rows', 5)
```


Exercises

1.


In the cell below, create a DataFrame `fruits` that looks like this:

	Apples	Bananas
0	30	21

```
# Your code goes here. Create a dataframe matching the above diagram and assign it to the variable fruits.
pd.DataFrame({'Apples':[30], 'Bananas':[21]})
```



	Apples	Bananas
0	30	21




2.




Create a dataframe `fruit_sales` that matches the diagram below:

	Apples	Bananas
2017 Sales	35	21
2018 Sales	41	34

```
# Your code goes here. Create a dataframe matching the above diagram and assign it to the variable fruit_sales.
fruit_sales = pd.DataFrame({'Apples':[35,41], 'Bananas':[21,34]},index=['2017 Sales','2018 Sales'])
fruit_sales
```



	Apples	Bananas
2017 Sales	35	21
2018 Sales	41	34



Next steps:

[Generate code with fruit_sales](#)[View recommended plots](#)[New interactive sheet](#)

3.

Create a variable `ingredients` with a Series that looks like:

```
Flour      4 cups
Milk       1 cup
Eggs       2 large
Spam       1 can
Name: Dinner, dtype: object
```

```
ingredients = pd.Series(['4 cups','1 cup','2 large','1 can'],index=['Flour','Milk','Eggs','Spam'],name='Dinner')
ingredients
```




Dinner	
Flour	4 cups
Milk	1 cup
Eggs	2 large
Spam	1 can

dtype: object

4.

Read the csv dataset of wine reviews into a DataFrame called `reviews`:

```
reviews = pd.read_csv('wine-reviews.csv',index_col=0)
reviews
```



	country	description	designation	points	price	province	region_1	region_2	taster_name	taster_twitter_handle	title
0	Italy	Aromas include tropical fruit, broom, brimston...	Vulkà Bianco	87	NaN	Sicily & Sardinia	Etna	NaN	Kerin O'Keefe	@kerinokeefe	Nicos 20' Vult Bianc (Etn
1	Portugal	This is ripe and fruity, a wine that is smooth...	Avidagos	87	15.0	Douro	NaN	NaN	Roger Voss	@vossroger	Quin de Avidagc 20' Avidagc Re (Dour
...
129969	France	A dry style of Pinot Gris, this is crisp with ...	NaN	90	32.0	Alsace	Alsace	NaN	Roger Voss	@vossroger	Domair Marc Deit 20' Pin Gr (Alsac
129970	France	Big, rich and off-dry, this is powered by inte...	Lieu-dit Harth Cuvée Caroline	90	21.0	Alsace	Alsace	NaN	Roger Voss	@vossroger	Domair Schof 20' Lieu-c Har Cuvé Car

129971 rows × 13 columns

5.

Run the cell below to create and display a DataFrame called `animals`:

```
animals = pd.DataFrame({'Cows': [12, 20], 'Goats': [22, 19]}, index=['Year 1', 'Year 2'])
```

animals



	Cows	Goats
Year 1	12	22
Year 2	20	19

In the cell below, write code to save this DataFrame to disk as a csv file with the name `cows_and_goats.csv`.

```
# Your code goes here
animals.to_csv('cows_and_goats.csv')
```