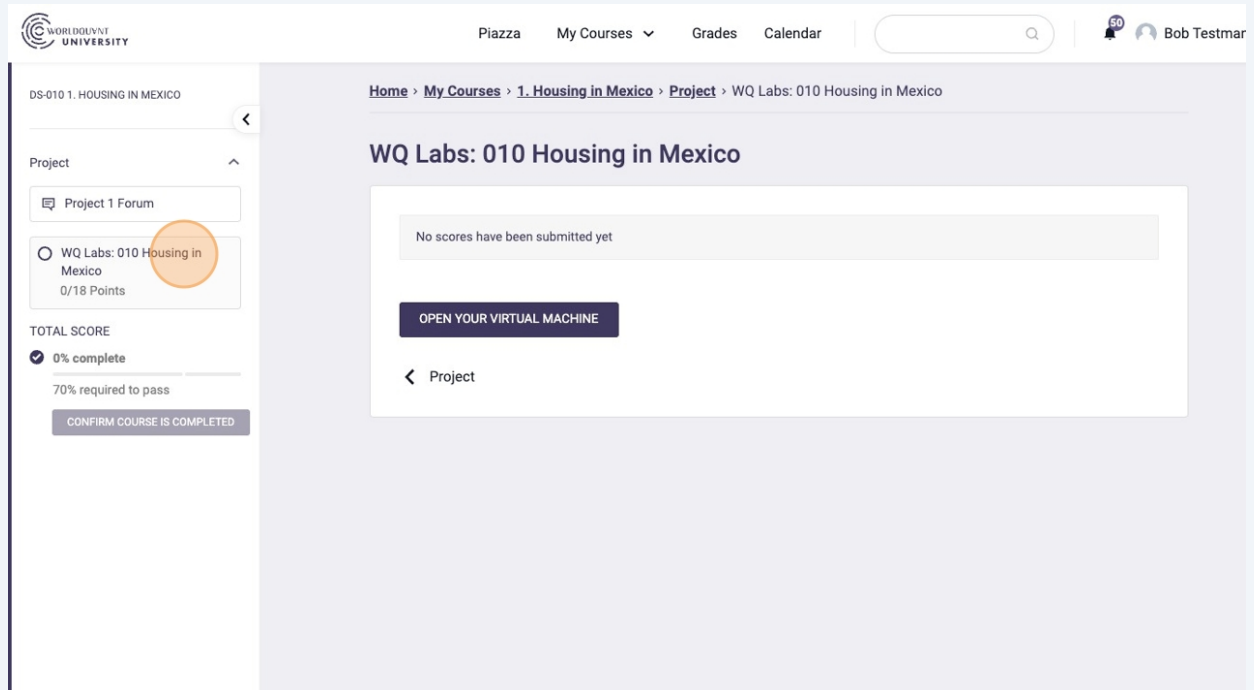


Getting Started with WorldQuant Learning Labs

How to launch the WorldQuant Learning Labs environment, select your project, watch videos while coding and submit auto-graded activities.

1 Navigate to the start of the Project



2 Click "Open your Virtual Machine"

WorldQuant University

Piazza My Courses Grades Calendar

Home > My Courses > 1. Housing in Mexico > Project > WQ Labs: 010 Housing in Mexico

WQ Labs: 010 Housing in Mexico

No scores have been submitted yet

OPEN YOUR VIRTUAL MACHINE

< Project

Project 1 Forum

WQ Labs: 010 Housing in Mexico 0/18 Points

TOTAL SCORE

0% complete

70% required to pass

CONFIRM COURSE IS COMPLETED

3 Select the appropriate notebook from the file system in JupyterLab. Here we will select **011-tabular-and-tidy-data.ipynb**

Jupyter > Project

File Edit View Run Kernel Tabs Settings Help

Launcher

project

Notebook

Python 3 (ipykernel)

Console

data

images

011-tabular-and-tidy-data.ipynb

012-data-wrangling.ipynb

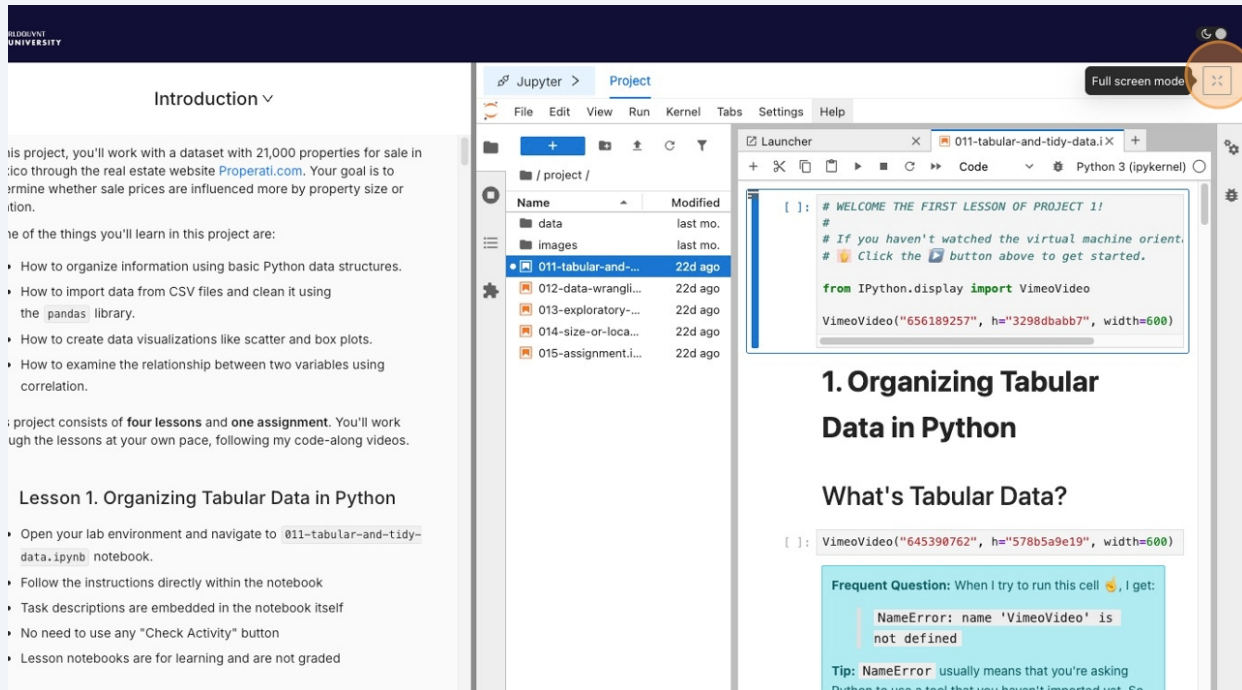
013-exploratory-data-analysis.ipynb

014-size-or-location.ipynb

015-assignment.ipynb

4

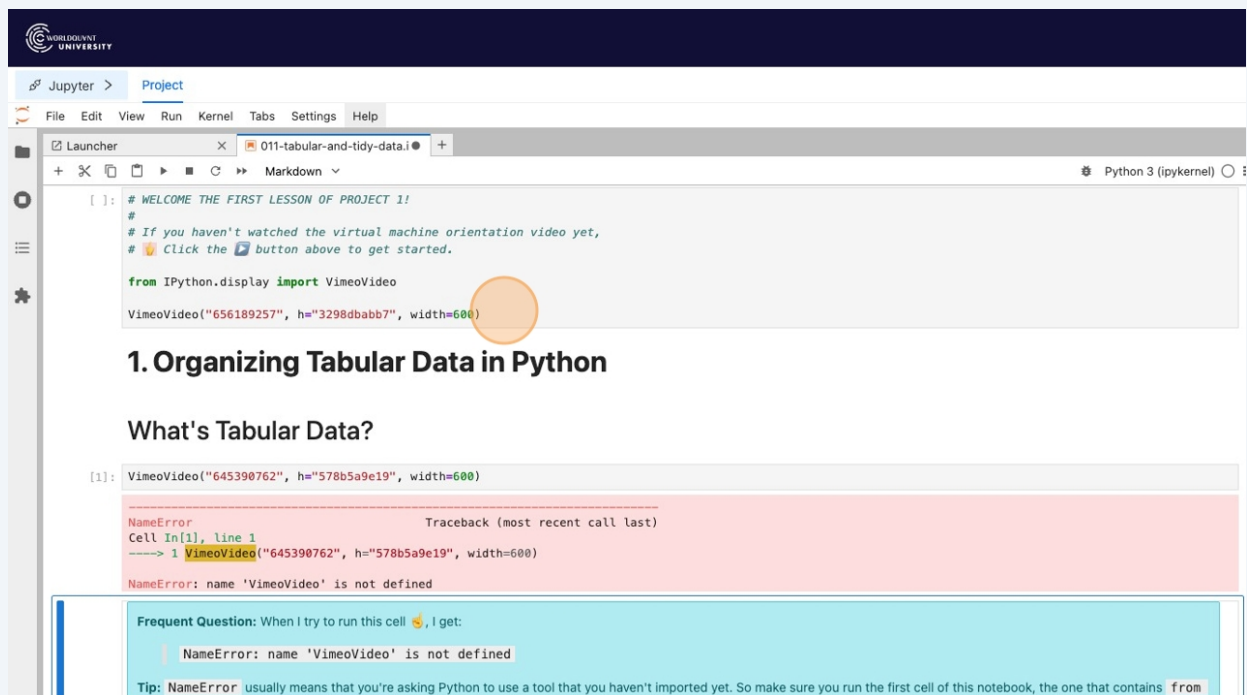
For many notebooks, you will not have any graded activity checks. So you can maximize the Jupyter interface and minimize the left panel by clicking the  symbol in the upper-right-hand corner of the window.



The screenshot shows the Jupyter interface with the 'Full screen mode' button highlighted in the top right corner. The interface is divided into three main sections: a left sidebar with a file explorer, a central code editor, and a right sidebar with a file explorer and a video player. The video player is currently showing a video titled '1. Organizing Tabular Data in Python'.

5

Remember to always run the first cell to load the Vimeo video player.



The screenshot shows the Jupyter interface with the first cell of the notebook being executed. The cell contains the following code:

```
[ ]: # WELCOME THE FIRST LESSON OF PROJECT 1!
#
# If you haven't watched the virtual machine orientation video yet,
# Click the button above to get started.

from IPython.display import VimeoVideo

VimeoVideo("656189257", h="3298dbabb7", width=600)
```

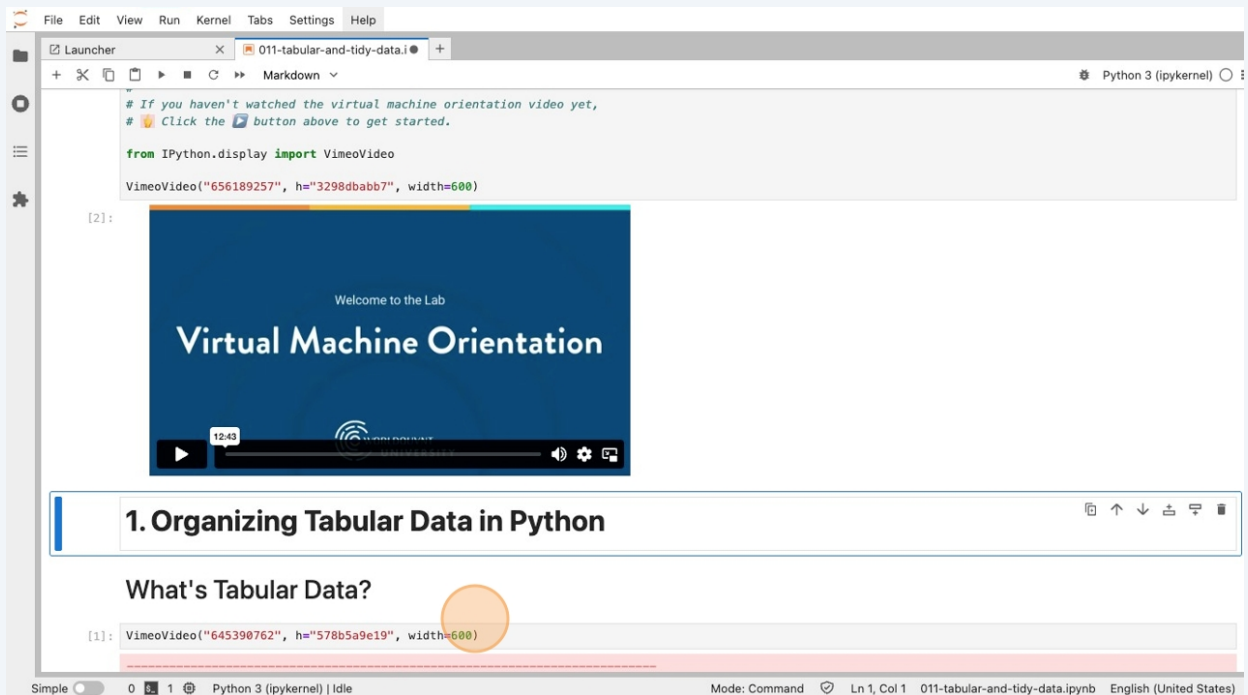
The video player is currently showing a video titled '1. Organizing Tabular Data in Python'.

Below the code cell, there is a red error message:

```
NameError: name 'VimeoVideo' is not defined
Traceback (most recent call last)
Cell In[1], line 1
----> 1 VimeoVideo("645390762", h="578b5a9e19", width=600)
NameError: name 'VimeoVideo' is not defined
```

A frequent question box is also visible, stating: 'Frequent Question: When I try to run this cell, I get: NameError: name 'VimeoVideo' is not defined. Tip: NameError usually means that you're asking Python to use a tool that you haven't imported yet. So make sure you run the first cell of this notebook, the one that contains from'.

6 Run the Video Cell to load the code-along videos in-line.



The screenshot shows a Jupyter Notebook interface with a menu bar (File, Edit, View, Run, Kernel, Tabs, Settings, Help) and a toolbar. The notebook has two tabs: 'Launcher' and '011-tabular-and-tidy-data.i'. The active cell is a code cell with the following text:

```
# If you haven't watched the virtual machine orientation video yet,  
# Click the button above to get started.  
  
from IPython.display import VimeoVideo  
  
VimeoVideo("656189257", h="3298dbabb7", width=600)
```

The output of the code cell is a video player showing a blue screen with the text "Welcome to the Lab" and "Virtual Machine Orientation". The video player has a play button, a progress bar, and a volume icon.

Below the video player is a section titled "1. Organizing Tabular Data in Python" with a sub-section "What's Tabular Data?". Below this is another code cell with the following text:

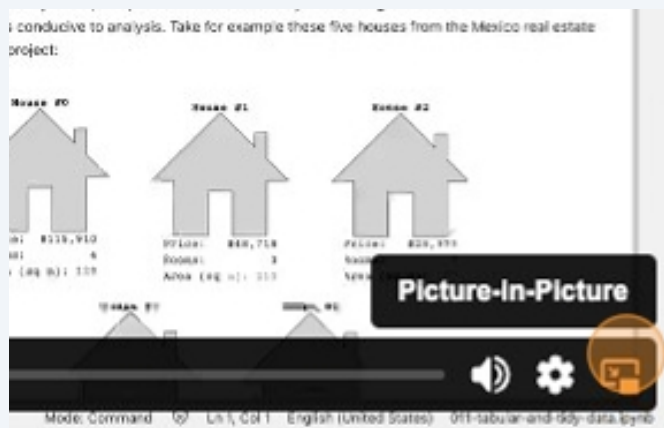
```
[1]: VimeoVideo("645390762", h="578b5a9e19", width=600)
```

The status bar at the bottom shows "Simple", "0", "1", "Python 3 (ipykernel) | Idle", "Mode: Command", "Ln 1, Col 1", "011-tabular-and-tidy-data.ipynb", and "English (United States)".

7 Type "enter"

8

You can use the Picture-in-Picture feature to overlay a video on your notebook while you read and write code.

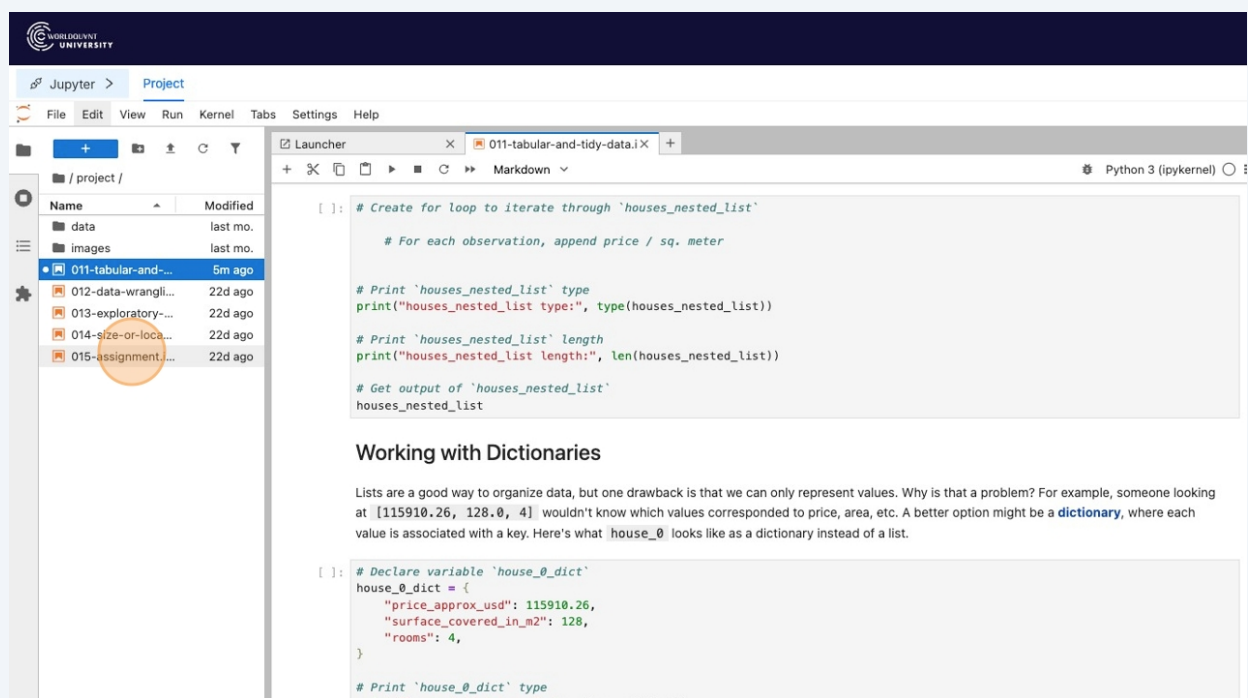


is cell 🙌, I get:

'leo' is not defined

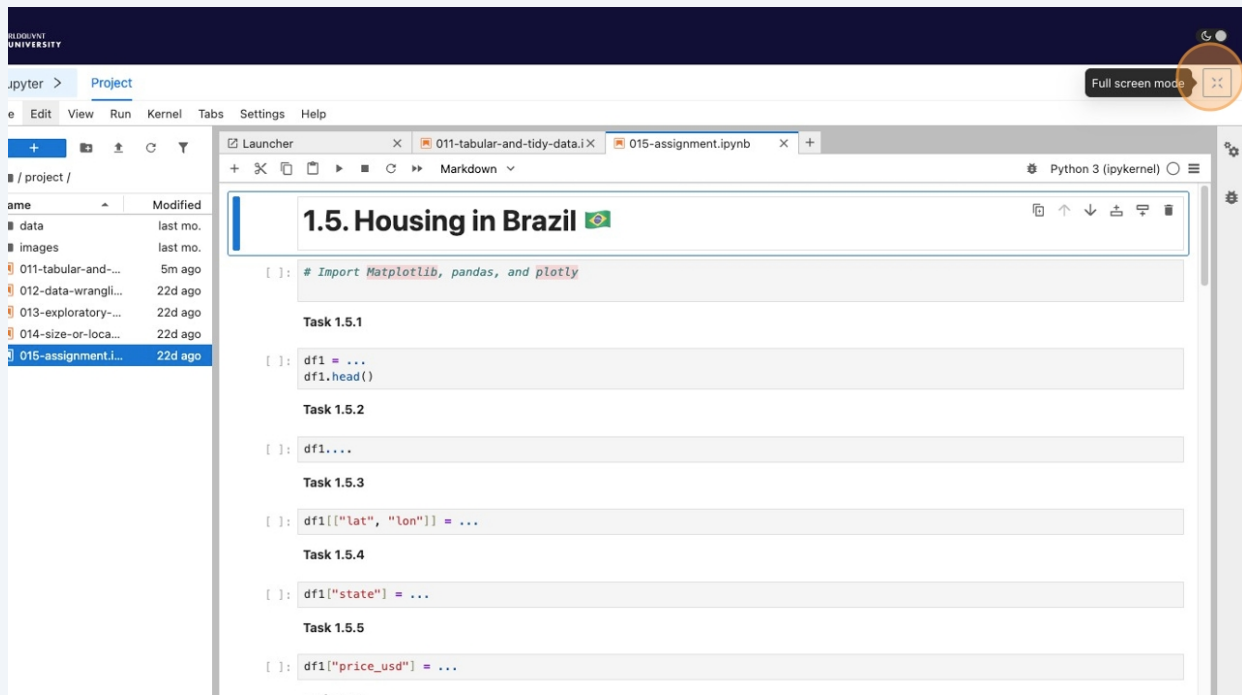
9

When you have finished all of the exercises, it's time to start the assignment. Here we will use the example of **015-assignment.ipynb**



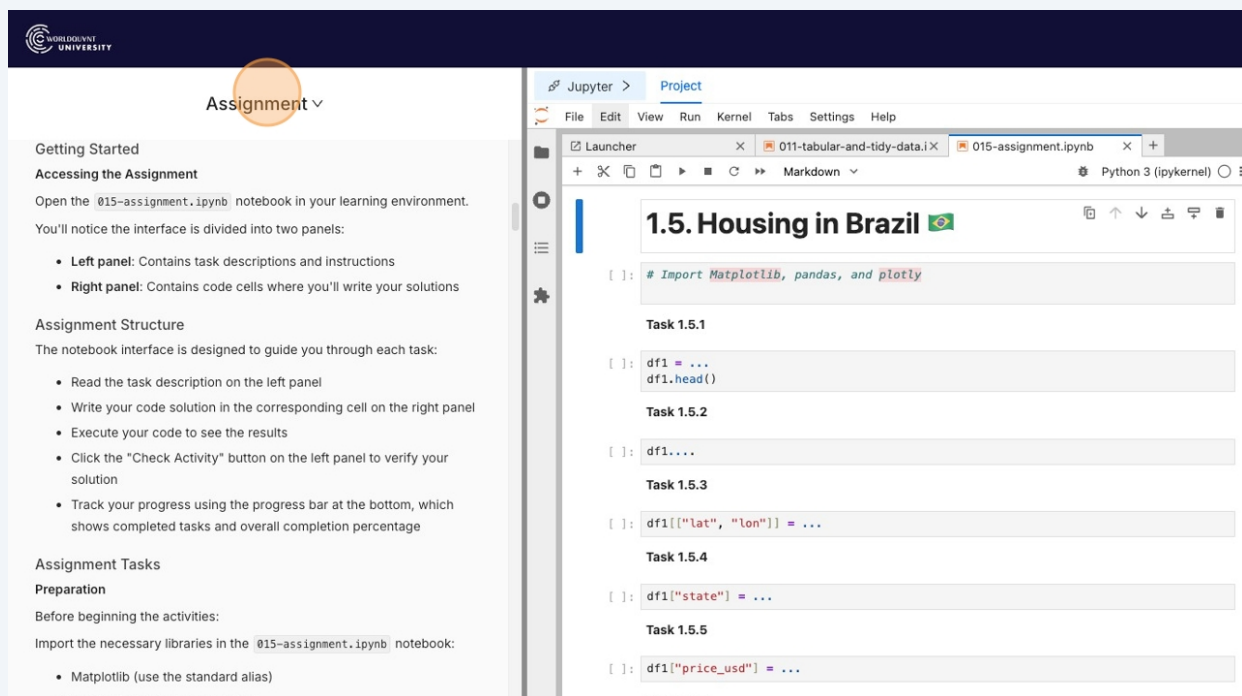
10

Minimize the notebook and show the left-hand panel for auto-graded activity checks.



11

You can always view the Table of Contents in the left-hand panel.



12

Complete an activity in the notebook panel and check your answer in the left-hand panel.

Assignment

Good luck with your analysis of the Brazilian real estate market!

1 Task 1.5.1

Import the CSV file `data/brasil-real-estate-1.csv` into the DataFrame `df1`.

EXPECTED OUTCOME:
`df1.head()` should look like this:

	property_type	place_with_parent_names	region	lat-lon	area_m2	price_usd
0	apartment	[Brasil Alagoas Maceiô]	Northeast	-9.6443051,-35.7088142	110.0	\$187,230.85
1	apartment	[Brasil Alagoas Maceiô]	Northeast	-9.6430934,-35.70484	65.0	\$81,333.37
2	house	[Brasil Alagoas Maceiô]	Northeast	-9.6227033,-35.7297953	211.0	\$154,465.45
3	apartment	[Brasil Alagoas Maceiô]	Northeast	-9.622837,-35.719556	99.0	\$146,013.20
4	apartment	[Brasil Alagoas Maceiô]	Northeast	-9.654955,-35.700227	55.0	\$101,416.71

Check Activity

Before you move to the next task, take a moment to inspect `df1` using the `info` and `head` methods. What issues do you see in the data? What cleaning will you need to do before you can conduct your analysis?

2 Task 1.5.2

Drop all rows with `NaN` values from the DataFrame `df1`.

EXPECTED OUTCOME:
`df1.head()` should look like this:

Completed activities 0/19 0%

File Edit View Kernel Tabs Settings Help

011-tabular-and-tidy-data.ipynb 015-assignment.ipynb

Python 3 (ipykernel)

1.5. Housing in Brazil 🇧🇷

```
[1]: # Import Matplotlib, pandas, and plotly
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
```

Task 1.5.1

```
[2]: df1 = pd.read_csv("data/brasil-real-estate-1.csv")
df1.head()
```

	property_type	place_with_parent_names	region	lat-lon	area_m2	price_usd
0	apartment	[Brasil Alagoas Maceiô]	Northeast	-9.6443051,-35.7088142	110.0	\$187,230.85
1	apartment	[Brasil Alagoas Maceiô]	Northeast	-9.6430934,-35.70484	65.0	\$81,333.37
2	house	[Brasil Alagoas Maceiô]	Northeast	-9.6227033,-35.7297953	211.0	\$154,465.45
3	apartment	[Brasil Alagoas Maceiô]	Northeast	-9.622837,-35.719556	99.0	\$146,013.20
4	apartment	[Brasil Alagoas Maceiô]	Northeast	-9.654955,-35.700227	55.0	\$101,416.71

Task 1.5.2

```
[ ]: df1...
```

Task 1.5.3

```
[ ]: df1[["lat", "lon"]] = ...
```

Simple 0 2 Python 3 (ipykernel) | Idle Mode: Command Ln 1, Col 1 015-assignment.ipynb En

13

☐ That's it! Now you're ready to "get it started in here!" ☐
We appreciate your role as part of our global learning community and offer best wishes on your Data Science Journey.