BANA-610
Visualization and Business Communication

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Interactive Visualization
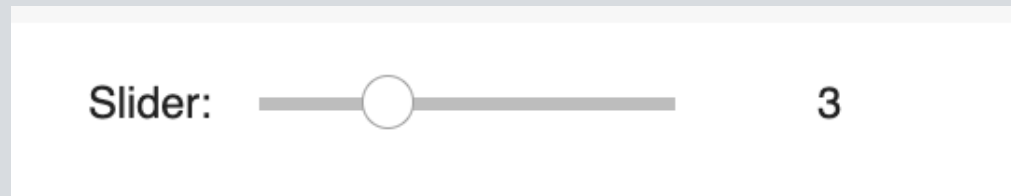
ipywidgets

- ipywidgets is a library in Python that provides interactive widgets for the Jupyter notebook environment.

- These widgets allow you to create interactive GUI components, such as sliders, dropdowns, and buttons, directly within your Jupyter notebooks.

Exercise

Slider:

- a slider is an interactive widget that allows users to select a value or range of values by moving a handle along a track.

Exercise

Dropdown:
- A dropdown is a graphical control element that allows a user to choose one value from a list.
- When activated, it displays (drops down) a list of values, from which the user may select one.
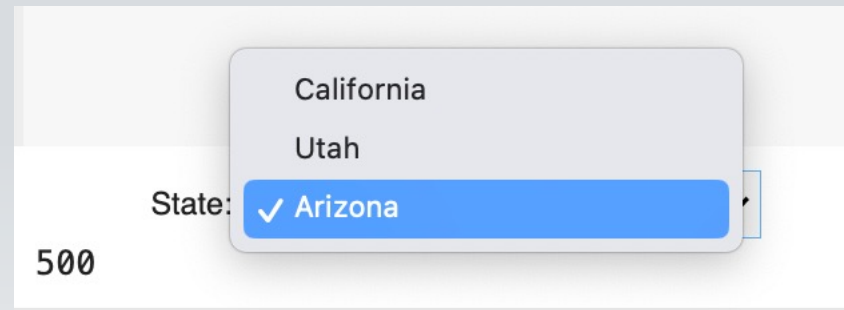
Choose: | Arizona ⌄ |

Exercise

- Let's say you made different number of sales in California (1000), Utah (800), and Arizona (500).
- Please create a dropdown interaction application to reflect the information above.

Exercise

Let's say the sale can be descripted as the following function:

$$y = 2 * x + 4$$

y is the sale. x represents the ads fee, and 4 is a constant.
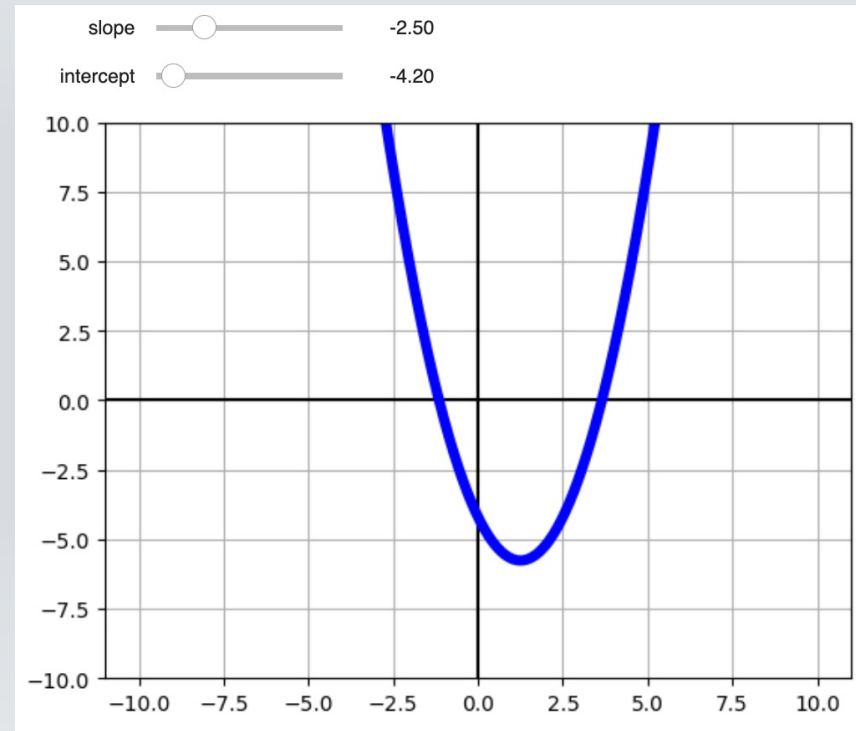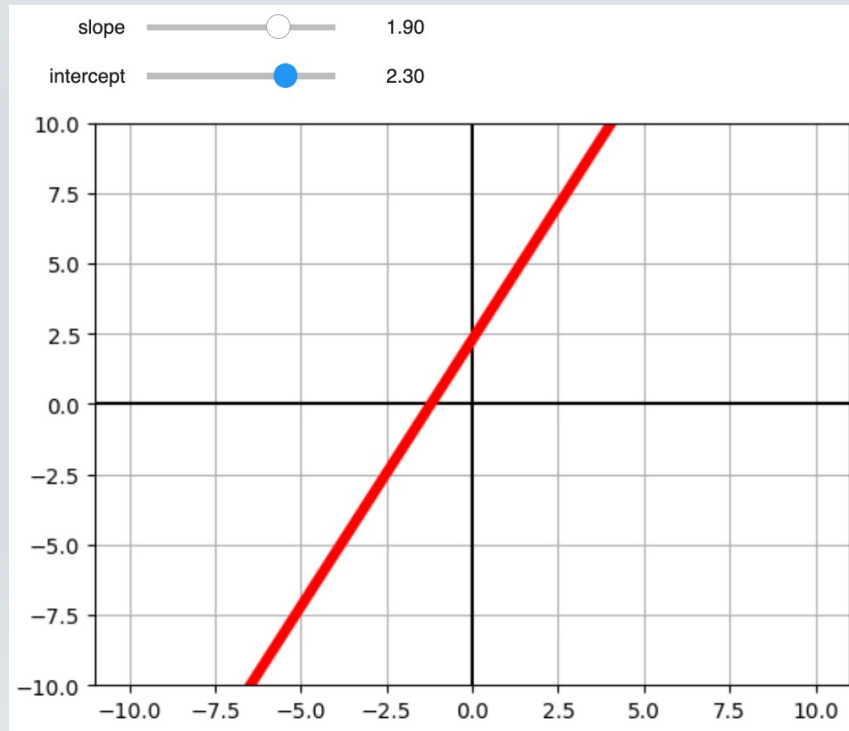Please create a slider showing the function.

Exercise

Let's say the revenue can be descripted as the following function:

$$z = 2 * x + 2 * y + 4$$

z is the revenue. x represents the sale, y represents asset, and 4 is a constant.
Please create sliders showing the function.

Exercise

Task For You

Let's say the revenue can be descripted as the following function:

$$y = \sin(x) + bias$$

Please create sliders showing the function.

Task For You

Let's say the revenue can be descripted as the following function:

$$y = \log(x + a)$$

a is a changing constant.
Please create sliders showing the function.