**Visualizing USA Medal Counts by Edition: Area Plot with Ordered Medals**

You may have noticed that the medals are ordered according to a lexicographic (dictionary) ordering: Bronze < Gold < Silver. However, you would prefer an ordering consistent with the Olympic rules: Bronze < Silver < Gold.

You can achieve this using Categorical types. In this final exercise, after redefining the 'Medal' column of the DataFrame medals, you will repeat the area plot from the previous exercise to see the new ordering.

**INSTRUCTIONS**

* Redefine the 'Medal' column of the DataFrame medals as an *ordered categorical*. To do this, use pd.Categorical() with three keyword arguments:
  + values = medals.Medal.
  + categories=['Bronze', 'Silver', 'Gold'].
  + ordered=True.
  + After this, you can verify that the type has changed using medals.info().
* Plot the final DataFrame usa\_medals\_by\_year as an *area plot*.

# Redefine 'Medal' as an ordered categorical

medals.Medal = pd.Categorical(values=medals.Medal, categories=['Bronze', 'Silver', 'Gold'], ordered=True)

# Create the DataFrame: usa

usa = medals[medals.NOC == 'USA']

# Group usa by 'Edition', 'Medal', and 'Athlete'

usa\_medals\_by\_year = usa.groupby(['Edition', 'Medal'])['Athlete'].count()

# Reshape usa\_medals\_by\_year by unstacking

usa\_medals\_by\_year = usa\_medals\_by\_year.unstack(level='Medal')

# Create an area plot of usa\_medals\_by\_year

usa\_medals\_by\_year.plot.area()

plt.show()