Match each data type to its definition.

These types (State, Edge, and Pollster) are all very simple. They're represented as data types you're familiar with such as string and float.

This assignment has several other data types that contain these types. For example, instead of having a list of strings, you might have a list of Edges. Instead of having a dictionary from string to float, you will have a dictionary from State to Edge.

Describing something as a "dictionary mapping from a State to an Edge" is more useful than describing it as a "dictionary mapping from a string to a float". Calling the contained values States and Edges (rather than strings and floats) suggests what the string and floats are and how the data structure is meant to be used.

<table>
<thead>
<tr>
<th>Represents a state as its two-letter abbreviation.</th>
<th>Edge</th>
<th>Pollster</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>The difference between Democratic and Republican vote percentages in a state election.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The name of a pollster.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Correct

Question:
Represents a state as its two-letter abbreviation.

Answer:
State

Question:
The difference between Democratic and Republican vote percentages in a state election.

Answer:
Edge

Question:
The name of a pollster.

**Answer:**
Pollster

---

**5/5**

Match each data type to its definition.

These data structures are composed of the types above (Edge, State, Pollster), and most are dictionaries.

<table>
<thead>
<tr>
<th>Pollster</th>
<th>Edges</th>
<th>PollsterErrors</th>
<th>PollsterPredictions</th>
<th>StateEdges</th>
<th>StatePredictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every pollster's prediction for one particular state.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The result of either (a) an election or (b) a poll for each state.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>For each state, every pollster's prediction for that state.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Every pollster's average error.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>A collection of pollsters, each of which has made a prediction for some States.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

**Correct**

**Question:**
Every pollster's prediction for one particular state.
2/2

Match each data type to its definition.

These types are different from the previous ones because you always know what keys they contain. Typically, when using these data types, you will interact with them as:

```
poll_data_row['State']
```

or

```
election_data_row['Dem']
```

This is in contrast to the other dictionary data structures, where they keys are states or pollsters and you typically iterate over them in a for loop. You won't ever iterate over this dictionary.

<table>
<thead>
<tr>
<th>Representation</th>
<th>PollDataRow</th>
<th>ElectionDataRow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Represents the outcome of a poll in a state (one row of a spreadsheet-formatted dataset)</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Represents the outcome of an election in a particular state (one row of a spreadsheet-formatted dataset)</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Correct

Question:
Represents the outcome of a poll in a state (one row of a spreadsheet-formatted dataset)
Answer:
PollDataRow

Question:
Represents the outcome of an election in a particular state (one row of a spreadsheet-formatted dataset)
Answer:
ElectionDataRow

3/3 Match each data type from the Election Prediction Assignment to its Python data type.

<table>
<thead>
<tr>
<th></th>
<th>string</th>
<th>float</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>Edge</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>Pollster</td>
<td>☑</td>
<td>☐</td>
</tr>
</tbody>
</table>

Correct

Question:
State
Answer:
string

Question:
Edge
Answer:
float

Question:
Pollster
Answer:
string

5/5 Match each data type from the Election Prediction Assignment to its Python data type.

PollsterEdges PollsterPredictions StateEdges StatePredictions PollsterErrors

Dictionary from state
Dictionary from pollster to edge.

Dictionary from pollster to state to edge (dictionary in a dictionary).

Dictionary from state to pollster to edge (dictionary in a dictionary).

Dictionary from pollster to error.

Correct

**Question:**
Dictionary from state to edge.

**Answer:**
StateEdges

**Question:**
Dictionary from pollster to edge.

**Answer:**
PollsterEdges

**Question:**
Dictionary from pollster to state to edge (dictionary in a dictionary).

**Answer:**
PollsterPredictions

**Question:**
Dictionary from state to pollster to edge (dictionary in a dictionary).

**Answer:**
StatePredictions

**Question:**
Dictionary from pollster to error.

**Answer:**
PollsterErrors
Match each data type from the Election Prediction Assignment to its Python data type.

<table>
<thead>
<tr>
<th>PollDataRow</th>
<th>ElectionDataRow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dictionary with string keys (&quot;State&quot;, &quot;Dem&quot;, &quot;Rep&quot;) and string values.</td>
<td>○</td>
</tr>
<tr>
<td>Dictionary with string keys (&quot;State&quot;, &quot;Dem&quot;, &quot;Rep&quot;, &quot;Date&quot;, &quot;Pollster&quot;) and string values.</td>
<td>○</td>
</tr>
</tbody>
</table>

**Correct**

**Question:**
Dictionary with string keys ("State", "Dem", "Rep") and string values.

**Answer:**
ElectionDataRow

**Question:**
Dictionary with string keys ("State", "Dem", "Rep", "Date", "Pollster") and string values.

**Answer:**
PollDataRow

2/2 Which of the following are true about a StateEdges? (You may mark multiple answers.)

- ☑ It can represent the outcome of an election on a state-by-state basis.
- ☑ It can represent the outcome of a particular poll on a state-by-state basis.
- ☐ It always contains all states.

**Correct**

**Answer:**
It can represent the outcome of an election on a state-by-state basis., It can represent the outcome of a particular poll on a state-by-state basis.

2/2 Which of the following are true about PollDataRow and ElectionDataRow? (You may mark multiple answers.)

- ☑ The keys are always strings, and so are the values (even if the value represents a number).
Each instance represents a row in a spreadsheet.
☐ All instances of ElectionDataRow contain the same FIVE keys.
☒ They are both dictionaries.
☐ All instances of PollDataRow contain the same THREE keys.
☒ A PollDataRow contains similar information as an ElectionDataRow (the same keys), plus some additional keys/information.
☐ Each ElectionDataRow can be used to PREDICT the outcome of an election in a particular state.
☒ Each PollDataRow is associated with a particular pollster on a particular date.

Correct

Answer:
They are both dictionaries., A PollDataRow contains similar information as an ElectionDataRow (the same keys), plus some additional keys/information., The keys are always strings, and so are the values (even if the value represents a number), Each instance represents a row in a spreadsheet., Each PollDataRow is associated with a particular pollster on a particular date.

Questions or Comments?
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