CSE 160 Section 5
Practice Problems

Use the following function and list to help answer problems 1 and 2:

```
def row_to_edge(row):
    """
    Returns the difference between the "Dem" and "Rep" values of row.
    """
    return float(row["Dem"]) - float(row["Rep"])

rows = [ { "State":"AK", "Dem":"41.3", "Rep":"55.3" },
    { "State":"AL", "Dem":"38.4", "Rep":"60.7" },
    { "State":"AR", "Dem":"36.9", "Rep":"60.5" },
    ... ]
```

1. Given the function `row_to_edge` and a list of rows, print the number of Democratic states, Republican states, and neutral states in the list.

   If `row_to_edge` returns a positive float, then that state is considered to be a Democratic state, if it returns a negative float then the state is considered to be a Republican state, and if it returns 0 the state is considered to be a neutral state.

2. Print the"most Democratic" state and the "most Republican" state. Most Democratic is defined as the state with the highest edge, and most Republican is defined as the state with the lowest edge.

Use the following dictionary of dictionaries to help answer problems 3, 4, and 5:

```
data = { "Gallup": { "WA": 7, "CA": 15, "UT": -30 },
    "SurveyUSA": { "CA": 14, "CO": 2, "CT": 13, "FL": 0, "KY": -14 },
    "RAND": { "NY": 11.2, "AZ": -9.8, "AR": -18.9 },
    ... }
```

3. Write one line of code that will execute the following commands:

   (a) Print a list of the keys in the dictionary data.

   (b) Print all of the key-value pairs in the dictionary data as a list of tuples.

   (c) Print all of the keys in the dictionary associated to the pollster `"Gallup"`.

   (d) Print the edge for `"RAND"` and `"CA"` or `None` if it does not exist.

4. Write a function `get_results_for(data, state)` that returns a list of tuples `(pollster, edge)`. The first element is the name of the pollster and the second element the edge corresponding to the given state. If the pollster and state do not have an edge, store its value as `None`.

5. Write a function that returns the list of tuples for California `"CA"`. You should use your function `get_resutls_for(data, state)` from problem 4.