Weather trends:

1. Latitude does seem to be correlated with temperature, but to get an accurate relationship, you would need to take the temperature reading at the same local time in each city. This code pulls the temperature at the time of the API call, which could be at 4 pm, when the daily temp is near its maximum or 4 am, where the local temperature is near its daily minimum, or somewhere in between.
2. A similar observation regarding humidity – relative humidity is near 100% when the daily temperature is at its lowest. Any cities sampled in the middle of the night will have higher relative humidity than if the humidity value was measures during the day.
3. Altitude also is a factor in the weather in a location. Two cities can be at the same latitude but the weather at a higher altitude will be different.
4. If we want to develop a correlation between latitude and another weather datapoint, we need to take data on more than one day. Some latitudes have large variations in weather depending on the time of the year. The seasons are also different for latitudes north of the Equator and South of the Equator. To get a full picture of the weather in a location you would need data taken periodically over a full year.