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**Denver University Data Analytics Bootcamp**

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**Module 6 Challenge**

**Module 6 Challenge Background**

* Data's true power is its ability to definitively answer questions. So, let's take what you've learned about Python requests, APIs, and JSON traversals to answer a fundamental question: "What is the weather like as we approach the equator?"
* Now, we know what you may be thinking: “That’s obvious. It gets hotter.” But, if pressed for more information, how would you prove that?

**Analysis**

**This activity is broken down into two deliverables, WeatherPy and VacationPy.**

* **Included in WeatherPy is a relationship analysis comparison and linear regression model of the following:**
  + **Latitude vs Temperature**
  + **Latitude vs Humidity**
  + **Latitude vs Cloudiness**
  + **Latitude vs Wind Speed**
* **Included in VacationPy is a map of the DataFrame generated in WeatherPy. Also included is map of hotels generated using an API call to Geoapify based on a DataFrame of Ideal Weather Conditions using the following conditions :**
  + **Minimum temperature is 20ºC**
  + **Maximum temperature is 30ºC**
  + **Humidity is less than 50%**

**Note: The original activity asks to use hyplot to solve VacationPy, however there is a current version module conflict which was identified by one of the TAs and could not be solved by AskBCS. Plotly.express was used as a substitute.**