Instructions:

Evaluate the homework against the outlined criteria in the below rubric, assigning a rating to each criterion. Add points earned across all criteria and convert the total points to a letter grade, assigning a “+” or “-” letter grade designation at your discretion.

A (+/-)	90+	C (+/-)	40-64	F (+/-)	<15
B (+/-)	65-89	D (+/-)	15-39		

Notes:

The deployed assignment utilizes the **OpenWeatherMap API** and the **citipy** library to complete the challenge. The source code should also be deployed to **Github** or **Gitlab**. For the Google Maps portion of the assignment there is no need to run the code and use your API, use the attached screenshots of the heat maps to grade.

Rubric for WeatherPy:

	Mastery 20 points	**Approaching Mastery 15 points**	**Progressing 10 points**	**Emerging 5-0 points**	**Incomplete**
API Querying	✓ API Key was imported from external script and used as variable ✓ Correctly loops over the list of cities ✓ No errors interrupt the API call loop ✓ Prints out the current number and name of the city they are currently retrieving data for	✓ API Key was imported from external script and used as variable ✓ Correctly loops over the list of cities ✓ No errors interrupt the API call loop ✓ Does not print out the current number and name of the city they are currently retrieving data for	✓ API Key is hardcoded rather than stored in external file ✓ Correctly loops over the list of cities ✓ Some errors occur during the api call loop ✓ Does not print out the current number and name of the city they are currently retrieving data for	✓ API Key is hardcoded rather than stored in external file ✓ Loops over a static range rather than the length of the cities list ✓ Loop throws too many errors to complete ✓ Does not print out the current number and name of the city they are currently retrieving data for	No submission was received -OR- Submission was empty or blank -OR- Submission contains evidence of academic dishonesty

Data Modeling	✓A pandas dataframe is created and saved to a .csv from the data retrieved from the API. For part I the dataframe contains 500+ rows in all of the following columns: ✓ City latitude ✓ City longitude ✓ Max temperature ✓ Humidity ✓ Cloud coverage ✓ Wind speed ✓ City country ✓ City datetime -AND- For part II a dataframe is created that contains the following: ✓ Ten or less rows. ✓ City ✓ Country ✓ Latitude ✓ Longitude ✓ Hotel Name	✓ A pandas dataframe is created but not saved to a .csv from the data retrieved from the API. The dataframe contains 500+ rows in 4-6 of the following columns: ✓ City latitude ✓ City longitude ✓ Max temperature ✓ Humidity ✓ Cloud coverage ✓ Wind speed ✓ City country ✓ City datetime -AND- For part II a dataframe is created that contains at least the following: ✓ City ✓ Latitude ✓ Longitude ✓ Hotel Name	✓ A pandas dataframe is created, but not saved to a .csv from the data retrieved from the API. The dataframe contains 300-500 rows or only has 2-3 of the following columns: ✓ City latitude ✓ City longitude ✓ Max temperature ✓ Humidity ✓ Cloud coverage ✓ Wind speed ✓ City country ✓ City datetime -AND- For part II a dataframe is created but does not contain the following: ✓ Ten or less rows. ✓ Hotel Name	✓ A pandas dataframe is created, but not saved to a .csv from the data retrieved from the API. ✓ The dataframe contains 200 or less rows or only has 1 column of data: -OR- ✓ A pandas dataframe is never created for either parts of the homework.	
Plot Creation	A plot is created with a title, axis labels and saved as a .png file for all of the following: ✓ `Latitude vs Temp` ✓ `Latitude vs Humidity` ✓ `Latitude vs Cloudiness` ✓ `Latitude vs Wind Speed` -AND- A plot is created for linear regression with a title, axis label and saved as a .png file for all of the following: ✓ `Northern Hemisphere - Temperature (F) vs.`	A plot is created for all of the following, but may omit a title, axis labels, or both: ✓ `Latitude vs Temp` ✓ `Latitude vs Humidity` ✓ `Latitude vs Cloudiness` ✓ `Latitude vs Wind Speed` -AND- A linear regression plot is created for all of the following, but may omit a title, axis labels or both: ✓ `Northern Hemisphere - Temperature (F) vs. Latitude`	A plot is created for 2-3 of the following, and may omit a title, axis labels, or both: ✓ `Latitude vs Temp` ✓ `Latitude vs Humidity` ✓ `Latitude vs Cloudiness` ✓ `Latitude vs Wind Speed` -AND- A plot is created for 2-3 of the following or not split into hemispheres, and may omit a title, axis labels, or both: ✓ `Northern Hemisphere - Temperature (F) vs.`	✓ 1 plot is created, but may be incorrect -OR- ✓ No plots are created	

	Latitude ✓ Southern Hemisphere - Temperature (F) vs. Latitude ✓ Northern Hemisphere - Humidity (%) vs. Latitude ✓ Southern Hemisphere - Humidity (%) vs. Latitude ✓ Northern Hemisphere - Cloudiness (%) vs. Latitude ✓ Southern Hemisphere - Cloudiness (%) vs. Latitude ✓ Northern Hemisphere - Wind Speed (mph) vs. Latitude ✓ Southern Hemisphere - Wind Speed (mph) vs. Latitude	✓ Southern Hemisphere - Temperature (F) vs. Latitude ✓ Northern Hemisphere - Humidity (%) vs. Latitude ✓ Southern Hemisphere - Humidity (%) vs. Latitude ✓ Northern Hemisphere - Cloudiness (%) vs. Latitude ✓ Southern Hemisphere - Cloudiness (%) vs. Latitude ✓ Northern Hemisphere - Wind Speed (mph) vs. Latitude ✓ Southern Hemisphere - Wind Speed (mph) vs. Latitude	Latitude ✓ Southern Hemisphere - Temperature (F) vs. Latitude ✓ Northern Hemisphere - Humidity (%) vs. Latitude ✓ Southern Hemisphere - Humidity (%) vs. Latitude ✓ Northern Hemisphere - Cloudiness (%) vs. Latitude ✓ Southern Hemisphere - Cloudiness (%) vs. Latitude ✓ Northern Hemisphere - Wind Speed (mph) vs. Latitude ✓ Southern Hemisphere - Wind Speed (mph) vs. Latitude		
Data Analysis	✓ Analysis correctly describes 3 observable trends ✓ Analysis provides sound reasoning to back up why all 3 trends are occurring.	✓ Analysis correctly describes 3 observable trends ✓ Analysis provides some reasoning to back up why the trends are occurring.	✓ Analysis describes only 2 observable trends ✓ Analysis provides little to no reasoning to back up why trends are occurring.	✓ Analysis only describes 1 observable trend ✓ Analysis is missing and/or does not contain any evidence to support their claim(s)	
Google Maps	✓ A heat map is successfully created. -AND- A second map is created that contains: ✓ Ten or less pins for all the cities in the dataFrame. ✓ Pins are clickable to display City, Country and Hotel Name ✓ Placed on top of the heatmap.	✓ A heat map is successfully created. -AND- A second map is created that contains: ✓ Ten or less pins for all the cities in the dataFrame. ✓ Placed on top of the heatmap.	✓ A heat map was attempted but does not display correctly. -AND- A second map is created that contains: ✓ More than ten pins. ✓ Not placed on top of the heatmap.	✓ A heat map and a second map were attempted but does not display correctly. -OR- ✓ No maps were displayed.	