

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 **cityipy** library to complete the challenge. The source code should also be deployed to **Github** or **Gitlab**.

Rubric for WeatherPy:

	Mastery 20 points	Approaching Mastery 15 points	Progressing 10 points	Emerging 5-0 points	Incomplete
API Querying	<ul style="list-style-type: none"> ✓ 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 	<ul style="list-style-type: none"> ✓ 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 	<ul style="list-style-type: none"> ✓ 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 	<ul style="list-style-type: none"> ✓ 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 	<p>No submission was received</p> <p>-OR-</p> <p>Submission was empty or blank</p> <p>-OR-</p> <p>Submission contains evidence of academic dishonesty</p>
Data Modeling	<ul style="list-style-type: none"> ✓ a pandas dataframe is created and saved to a .csv from the data retrieved from the API. <p>For part I the dataframe contains 500+ rows in all of the following columns:</p> <ul style="list-style-type: none"> ✓ City latitude ✓ City longitude ✓ Max temperature ✓ Humidity ✓ Cloud coverage ✓ Wind speed ✓ City country ✓ City datetime 	<ul style="list-style-type: none"> ✓ A pandas dataframe is created but not saved to a .csv from the data retrieved from the API. <p>The dataframe contains 500+ rows in 4-6 of the following columns:</p> <ul style="list-style-type: none"> ✓ City latitude ✓ City longitude ✓ Max temperature ✓ Humidity ✓ Cloud coverage ✓ Wind speed ✓ City country ✓ City datetime 	<ul style="list-style-type: none"> ✓ A pandas dataframe is created, but not saved to a .csv from the data retrieved from the API. <p>The dataframe contains 300-500 rows or only has 2-3 of the following columns:</p> <ul style="list-style-type: none"> ✓ City latitude ✓ City longitude ✓ Max temperature ✓ Humidity ✓ Cloud coverage ✓ Wind speed ✓ City country ✓ City datetime 	<ul style="list-style-type: none"> ✓ A pandas dataframe is created, but not saved to a .csv from the data retrieved from the API. <p>✓ The dataframe contains 200 or less rows or only has 1 column of data:</p> <p>-OR-</p> <ul style="list-style-type: none"> ✓ A pandas dataframe is never created for either parts of the homework. 	

	<p>-AND-</p> <p>For part II a dataframe is created that contains the following:</p> <ul style="list-style-type: none"> ✓ Ten or less rows. ✓ City ✓ Country ✓ Latitude ✓ Longitude ✓ Hotel Name 	<p>-AND-</p> <p>For part II a dataframe is created that contains at least the following:</p> <ul style="list-style-type: none"> ✓ City ✓ Latitude ✓ Longitude ✓ Hotel Name 	<p>-AND-</p> <p>For part II a dataframe is created but does not contain the following:</p> <ul style="list-style-type: none"> ✓ Ten or less rows. ✓ Hotel Name 		
<p>Plot Creation</p>	<p>A plot is created with a title, axis labels and saved as a .png file for all of the following:</p> <ul style="list-style-type: none"> ✓ Latitude vs Temp ✓ Latitude vs Humidity ✓ Latitude vs Cloudiness ✓ Latitude vs Wind Speed <p>-AND-</p> <p>A plot is created for linear regression with a title, axis label and saved as a .png file for all of the following:</p> <ul style="list-style-type: none"> ✓ Northern Hemisphere - Temperature (F) 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 	<p>A plot is created for all of the following, but may omit a title, axis labels, or both:</p> <ul style="list-style-type: none"> ✓ Latitude vs Temp ✓ Latitude vs Humidity ✓ Latitude vs Cloudiness ✓ Latitude vs Wind Speed <p>-AND-</p> <p>A linear regression plot is created for all of the following, but may omit a title, axis labels, or both:</p> <ul style="list-style-type: none"> ✓ Northern Hemisphere - Temperature (F) 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 	<p>A plot is created for 2-3 of the following, and may omit a title, axis labels, or both:</p> <ul style="list-style-type: none"> ✓ Latitude vs Temp ✓ Latitude vs Humidity ✓ Latitude vs Cloudiness ✓ Latitude vs Wind Speed <p>-AND-</p> <p>A plot is created for 2-3 of the following or not split into hemispheres, and may omit a title, axis labels, or both:</p> <ul style="list-style-type: none"> ✓ Northern Hemisphere - Temperature (F) 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 	<p>✓ 1 plot is created, but may be incorrect</p> <p>-OR-</p> <p>✓ No plots are created</p>	

	✓ Southern Hemisphere - Wind Speed (mph) vs. Latitude	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 heatmap 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 ✓ Place on top of the heatmap.	✓ A heatmap 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	