API TESTING

get_location()
INPUT 1: 21122
INPUT 2: US

OUTPUT
{"zip":"21122","name":"Anne Arundel County","lat":39.1206,"lon":-76.495,"country":"US"}

Observations: API returns consistent with a given US location.

get_location()
INPUT 1: 15417
INPUT 2: US

OUTPUT
{"zip":"15417","name":"Brownsville","lat":40.0237,"lon":-79.8839,"country":"US"}

Observations: API returns consistent with a given US location.

get_location()
INPUT 1: P1L
INPUT 2: CAN

OUTPUT
```
Traceback (most recent call last):
  File
"C:/Users/User/Downloads/WeatherDash/t3weatherapp-thatwolfk1d-patch-1/t3weatherapp-that
wolfk1d-patch-1/WeatherAPIs.py", line 81, in <module>
    get_location()
  File
"C:/Users/User/Downloads/WeatherDash/t3weatherapp-thatwolfk1d-patch-1/t3weatherapp-that
wolfk1d-patch-1/WeatherAPIs.py", line 25, in get_location
    latitude_cords = format(geolocation_data["lat"], ".2f")
KeyError: 'lat'
```

Observations: Canadian zip codes not working, gives error related to lat.

get_location()
INPUT 1: 47390
INPUT 2: FRA

OUTPUT
{"zip":"47390","name":"Randolph County","lat":40.2024,"lon":-84.8268,"country":"US"}

Observations: French zip code returned location data as if it was US zip code and US country code, despite french country code input. Investigate country code.

Investigation
The output of build_location is 47390&FRA when printed out mid-function, so the input of FRA is recognized.

get_current_forecast()
INPUT 1: 21122
INPUT 2: US

OUTPUT
{'coord': {'lon': -76.5, 'lat': 39.12}, 'weather': [{'id': 801, 'main': 'Clouds', 'description': 'few clouds', 'icon': '02d'}], 'base': 'stations', 'main': {'temp': 285, 'feels_like': 283.13, 'temp_min': 283.01, 'temp_max': 287.22, 'pressure': 1027, 'humidity': 34}, 'visibility': 10000, 'wind': {'speed': 1.54, 'deg': 0}, 'clouds': {'all': 20}, 'dt': 1669136578, 'sys': {'type': 2, 'id': 2078047, 'country': 'US', 'sunrise': 1669118223, 'sunset': 1669153655}, 'timezone': -18000, 'id': 4360201, 'name': 'Lake Shore', 'cod': 200}

Observations: Consistent with weather reports for 1200 11/22/2022. Only slight (within 5% for humidity, less than 5 miles per hour for wind speed) variations in humidity which seems reasonable considering differences between generally well

get_current_forecast()
INPUT 1: 15417
INPUT 2: US

OUTPUT
{'coord': {'lon': -79.88, 'lat': 40.02}, 'weather': [{'id': 800, 'main': 'Clear', 'description': 'clear sky', 'icon': '01d'}], 'base': 'stations', 'main': {'temp': 282.7, 'feels_like': 282, 'temp_min': 281.2, 'temp_max': 283.57, 'pressure': 1024, 'humidity': 32}, 'visibility': 10000, 'wind': {'speed': 1.79, 'deg': 168, 'gust': 5.81}, 'clouds': {'all': 1}, 'dt': 1669138883, 'sys': {'type': 2, 'id': 2040815, 'country': 'US', 'sunrise': 1669119171, 'sunset': 1669154331}, 'timezone': -18000, 'id': 5181946, 'name': 'Brownsville', 'cod': 200}

Observations: Consistent with weather reports for 1200 11/22/2022. Once again minor (within 5% for humidity, less than 5 miles per hour for wind speed) differences were seen in humidity and wind speed within acceptable bounds.

get_hourly_forecast()
INPUT 1: 21122
INPUT 2: US

OUTPUT
GET HOURLY FORECAST TEST A

Observations: Consistent with weather reports for 11/22/2022. Differences in humidity predictions and wind speed are considered minor (5% or 5mph respectively) from similar reporting sources.

get_hourly_forecast()
INPUT 1: 15417
INPUT 2: US

OUTPUT
GET HOURLY FORECAST TEST B

Observations: Consistent with weather reports for 11/22/2022. Differences in humidity predictions and wind speed are considered minor (5% or 5mph respectively) from similar reporting sources.

get_daily_forecast()
INPUT 1: 21122
INPUT 2: US

OUTPUT
GET DAILY TESTS

Observations: Relatively consistent for weather reports as of 11/22/2022. Differences seem negligible and deemed acceptable.

get_daily_forecast()
INPUT 1: 15417
INPUT 2: US

OUTPUT
GET DAILY TESTS

Observations: Relatively consistent for weather reports as of 11/22/2022. Differences seem negligible and deemed acceptable.

get_monthly_forecast()
INPUT 1: 21122
INPUT 2: US

OUTPUT
GET MONTHLY TESTS

Observations: Relatively consistent for weather reports as of 11/22/2022. Differences seem negligible and deemed acceptable.

get_monthly_forecast()
INPUT 1: 15417
INPUT 2: US

OUTPUT
GET MONTHLY TESTS

Observations: Relatively consistent for weather reports as of 11/22/2022. Differences seem negligible and deemed acceptable.