

Weather report code



This page shows Karl's (not-quite-finished) weather report code.

As you read through the code, you'll see that Karl has divided it into a series of functions. Each main task has its own function.

Remember, none of these functions will run until they're called. At the end of the program, you'll see that the `weather_dialog` function is the first one to get called, and this kicks off all of the other function calls in turn.

This chain of functions, with each function calling the next one and passing it some data, can be a little hard to follow. But this general sort of design is something you'll see very often in programming, because it makes the code more modular and flexible.

Remember, your main job is just to complete the `display_weather` function. If you're also able to figure out how the rest of the code works, that's fantastic—but not essential.

```
# TO DO:
# 1. Have display_weather print the weather report.
# 2. Handle network errors by printing a friendly message.
#
# To test your code, open a terminal below and run:
# python3 weather.py

import requests

API_ROOT = 'https://www.metaweather.com'
API_LOCATION = '/api/location/search/?query='
API_WEATHER = '/api/location/' # + woeid

def fetch_location(query):
    return requests.get(API_ROOT + API_LOCATION + query).json()

def fetch_weather(woeid):
    return requests.get(API_ROOT + API_WEATHER + str(woeid)).json()

def display_weather(weather):
    print(f"Weather for {weather['title']}:")
    print("Replace this message with the weather report!")
```

```

def disambiguate_locations(locations):
    print("Ambiguous location! Did you mean:")
    for loc in locations:
        print(f"\t* {loc['title']}")

def weather_dialog():
    where = ''
    while not where:
        where = input("Where in the world are you? ")
    locations = fetch_location(where)
    if len(locations) == 0:
        print("I don't know where that is.")
    elif len(locations) > 1:
        disambiguate_locations(locations)
    else:
        woeid = locations[0]['woeid']
        display_weather(fetch_weather(woeid))

if __name__ == '__main__':
    while True:
        weather_dialog()

```