

# Async Exercises

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In this exercise, you will use `async/await` to work with external APIs in-bulk.

We will use the [Talk Python weather API](#) to access the weather for multiple locations. Doing this in serial (synchronous code) can be somewhat slow. Using `async` will allow us to get results for all locations at once.

## Steps

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- Create a new folder/project where you can write some code.
- Create a `main.py` file to write your code in.
- Create a virtual environment, activate it, then install `httpx` (needed for `async` web calls).
- We want the weather for the following locations:
  - Portland, OR
  - Seattle, WA
  - La Jolla, CA
  - Phoenix, AZ
  - New York, NY
  - Boston, MA
- To access the weather for any location, we'll use the URL:

```
1 https://weather.talkpython.fm/api/weather?  
  city=CITY&state=STATE_ABBREVIATION&country=US&units=imperial  
2 # Units imperial or metric
```

- Write a function that takes the city and state to get the weather. This should be an ***async*** method. You will also need to pull the relevant information out of the dictionary you receive from the API. Recall that `async` methods look like:

```
1 async def some_function(arg1, arg2):  
2     sync_code()  
3     await async_code()  
4  
5     return value
```

- To implement this code, you'll need to use [httpx](#). The code should be quite similar to what we did accessing the titles of Talk Python episodes. So feel free to leverage the structure and examples from our [live code here](#).

## Solutions

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The solution (*a solution*) is in the `./solution` folder.

