Introduction

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In the prior section we wrote some code to extract a single link from a web page.

Some things to note about what we did:

1. It was a simple number of steps, three or four at most.
2. We used but two processes given us by Python itself, i.e., the string's `find()` method and the string's `slicing` operation.
3. We assumed a link was on the page.
4. The page was really just a snippet.
5. We were only looking for the very first link on the 'page' and ignored anything beyond it.
6. Perhaps most importantly, however, **this is how you begin any project, no matter its ultimate complexity**. That is, simply and taking but *one* step at a time.

> ⚠️ **Danger**
>
> Don't be fooled into thinking vast software projects and their programs are achieved in any other way but **one simple step** at a time.

We are on to our next single step towards building a search engine

In this unit we will extract **all** links from a full web page and, perhaps, from a various number of like pages.

But, in order to accomplish that, we have some prerequisites:

1. Be able to write (i.e., *implement*) and call on our very own custom **procedures**; and
2. Be able to **control** our program in such a way that, depending on the data (e.g., how many links on a page), the program will operate appropriately

- **Procedures** will package code so it can be reused with different inputs.
- **Control** will allow us to manage the program's *state*, instead of just executing instructions one after the other.