Programming Basics

Objects

Vocabulary

- **Object-Oriented Programming**: a style of programming that focuses on creating objects to represent individual concepts.
- **Object**: Objects are the “things” in your program. Objects of a given type all have the same methods and properties.
- A Dog-type object might have the properties of “tail” and “legs” and the methods “bark” and “wag_tail”
- **Class**: the blueprint for an object. Think of this like a cookie cutter.
- The class Dog would have “tail,” “legs,” “bark,” and “wag tail” included as part of its definition.
- An object of class Dog might be spot or doge.

Creating an Object

- You must first create an object.
- We will be using an object of type Article.
- Article objects need to be sent the URL they are created from.
- For now, we will be using an article about Black Panther, linked here: https://www.rogerebert.com/reviews/black-panther-2018

ACTIVITY SLIDE

- To create an object of type Article from this article, add another code block and put this in it, then run to make sure it is working:

```
article =
Article('https://www.rogerebert.com/reviews/black-panther-2018')
```

- The equivalent for the dogs described before (assuming Dog exists):
  - my_pet = Dog(“Spot”)
  - meme_dog = Dog(“Doge”)

Follow Along

- In a new code block, add the following line `article.download()`
- Parse the article, which runs all the things required to help the program figure out the article's title and "read" its content.

```
article.parse()
```

- Load the parser from nltk and make sure your article has been broken down into its component keywords

```
nltk.download('punkt')
```

```
article.nlp()
```

- So far, we have been calling methods on article. We can also call a property of the Article object we have created, called "text"
- `article.text`

ACTIVITY SLIDE

There is also a property of Article called “summary” which summarizes the article. In order to build the summary, the article needs to:

1. Run the nlp method on the article
2. Save and print out the summary of the article.

Add lines that will do this to your program.