

## The Basics

With any subject in the world, there is special vocabulary that describes the topic in that field of study. A collection of these basic vocabulary words will be kept here:

- Syntax
- Syntax is to programming languages, as grammar is to languages.
- keyword
- A keyword is a special word in the language's syntax that does a special action. Here is a list of keywords, such as `print` and `def`.
- Variable
- To say variables in Computer Science are like variables in algebra is saying a wolf is a dog. You are correct, but there is more to it. Variables in Python can be reassigned unlike variables in mathematics because in math it is implied that once you assign a value to a variable it never changes.
- Semantic
- Semantic is usually said in a type of error such as a “syntax error” or a “semantic error”. A syntax error is like a grammar error. Semantic error is a logic error. It's like if you subtract a number instead of adding a number; your logic is wrong so you have an error. Python won't tell you it is an error but you will notice that your program is giving you weird results.
- Parameter v. argument
- Let's define a function.

```
def add3(x):  
    answer = x + 3  
    return answer
```

```
print add3(5)
```

`x` is called a parameter because it is a variable that is used as an input. The variable `answer` and the value `5` are known as arguments because values are assigned to them inside the function. Most programmers will not talk about `answer` being an argument, but that `x` is a parameter and, in our case, `5` is a argument.