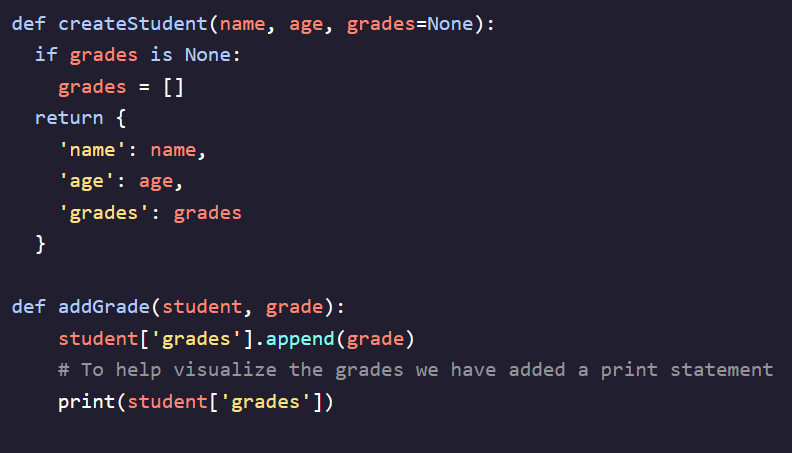
**Mutables and Functions:**

- It is a common mistake in Python to set a mutable object as the default value of an argument  
- A *gotcha* is a counterintuitive feature of a programming language that often leads to mistakes in programs  
- A *Mutable Object* – refers to various containers in Python that are intended to be changed (lists that we can append/delete, sets, and dictionaries)  
- *Immutable Objects* – tuples, int, float, strings

- When we call a function, the default value provided for parameters are only created once and used for each subsequent call of the function (anytime it is accessed later it is the same list that gets modified)   
- If we want to utilize an empty list as a potential default argument value we initiate it with “None” and write code to modify it   


- ***Unpacking Operator (\*)***– Allows us to give our functions a variable number of arguments by performing  ***Positional Argument Packing***- *args –* shorthand for arguments, can use \*args to store multiple arguments in a function (*args is arbitrary and can be replaced with any variable name)*- \* will store the arguments passed into the function as a tuple and allows it to accept any number of arguments  
