The keywords super and this are very powerful tools when using inheritance in Java. The super keyword allows for a class to access its parent class’s member variables and constructor. While the this keyword allows a class to access its own member variables, and have other variables with the same name. This is important because the child class inherits all the variables and methods from its parent class.

A computer screen shot of a code

Description automatically generated

In my example above I created a person class that has three member variables and a constructor. In the Person class I use the “this” keyword to assign the member variables values that are passed to it in the constructor.

A computer screen shot of text

Description automatically generated

The class above shows a Student class that is a child to the Person class. This means that the Student class has all the member variables and methods from the Parent class as well as its own variables such as gpa. In the Student Constructor it takes four parameters, since three of the parameters are from the Person class, instead of assigning all the values individually again in the Student constructor I used the super keyword to call the constructor from the Person class, and I only had to use the this key word to assign the last parameter. I created a method that modifies the instance variable in the child class. The super parameter allows for access to the Parent classes member variables, while the “this” keyword allows an object to access its own version of the variables it inherited.

References

Eck, D. J. (2019). *Introduction to programming using Java, version 8.1.* [**http://math.hws.edu/javanotes**](http://math.hws.edu/javanotes).