this vs super & this() vs super()

super:

 The keyword 'super' is used to access or call the parent class members (variables and methods).

this:

• The keyword 'this' is used to call the current class members (variables and methods).



• 'this' is required, when we have a parameter with the same name, as an instance variable or field.

NOTE: We can use either of them anywhere in a class, except for static elements, like a static method. Any attempt to do so there, will lead to compile time errors.

this():

- Use 'this()' to call a constructor from another overloaded constructor in the same class.
- The call to 'this()' can only be used in a constructor, and it must be the first statement in a constructor

 It's used with constructor chaining, in other words when one constructor calls another constructor, and it helps to reduce duplicated code.

super():

- The only way to call a parent constructor, is by calling 'super()', which calls the parent constructor.
- The java compiler puts a
 default call to 'super()', if we
 don't add it, and its always a
 call to the no argument
 constructor, which is inserted
 by the compiler.

 The call to 'super()' must be the first statement in each constructor.

NOTE: A constructor can have a call to 'super()' or 'this()', but not both

