Key Concepts for Programming in Avenue:

Understand Variables
Variables hold references to objects. Therefore, if you get an object, you can reference it with a variable. This means that instead of going through the long process of retrieving an object every time you want to do something with it, you can just get it with the variable, which references it directly.

Understand Loops
Loops let you navigate through a list or a series of things. Use loops to do the same thing over and over again for each element in a list or a series. You can use either for .. each loops, or while loops. You can actually do any looping that you need with a while loop, but many looping tasks are easier with the for .. each loop.

Understand Conditional Statements
If.. then statements (or if.. then.. else statements) allow you to only execute a section of code if your condition is met. In order to use them effectively, you need to be able to frame a question, and know what you want to do depending on the answer to your question.

Understand objects and the Object Model
1. Everything you work with is an object that is a member of a class
2. Every object has a collection of attributes and methods. The methods can be used to get, set, or modify the attributes.
3. In some cases, class “A” will inherit attributes and methods from class “B”. This is called a generalization relationship, and is represented in the Object Model Diagram with a triangle. All classes in Avenue inherit from the Obj class.
4. If you are looking for a list of all attributes and methods that a class offers, you need to search the list of all of its super-classes.

Once you understand the object model, you need to be able to use the Avenue help to find what objects you need to be working with, and what requests you need to make to those objects. This is difficult, because there is no inherent logic to the way objects and classes are designed. There are an infinite number of ways to design a set of classes and methods to solve any problem. What you need to do, then, is to figure out how the programmers who wrote Avenue decided to do it. You can only do this by reading the object model, and the help file.