Question 1: What were the elements of programming that you learned in your FOP course?

Group:
Our individual answers for this questions were pretty similar. We all identified the elements of programming as the base units we covered in the Scratch/Python portion of the course. (calculations, Boolean values, conditionals, iteration, functions, Input/Output, lists, and dictionaries). We also identified some less explicit elements that were consistently found across these units. Such as: determination and problem solving, breaking down a problem into smaller “chunks” and attacking those one at a time. We discussed how mistakes are inevitable and you will need to stick to it to be successful. Mistakes come in all shapes and sizes. There are simple clerical errors where we have missed an indentation or close parenthesis and there are larger conceptual mistakes, in which data is not being handled the way you think it is. Each type of mistake is frustrating in its own way, but each is necessary to learn the aspects of programming well.

There was also some discussion of the versatility of programming applications like Scratch and Python. Both programming environments are appropriate for lower grade levels as well as upper grade levels. The complexity of the programs is what varies. There was also discussion of the planning skills involved in programming. How to get started? How to know when you are done? How not to get lost in a program that has gotten too complex? How to get “unstuck” when you have gotten lost? How to reflect upon what you have done?