Read Me virtual N algebra organization

ArrayListOfLatinSquares4by4.py
A python file with one long list, labeled M, of every possible 4x4 Latin square with entries 0,1,2,3. A square is stored as a list of lists, or a list of rows of the square. For example [[1,2,3,4],[5,6,7,8],[9,10,11,12],[13,14,15,16]] is the square with first row [1,2,3,4] and so on.

PartialLatinSquares.py
A python file that takes in **ArrayListOfLatinSquares4by4.py** and creates partial 4x4 Latin squares. This will compute partial squares with up to 8 "missing entries"-- the missing entries are stored as the number 7 in the square. Comments in the file describe how to save the lists.

ListofLatinCubes.py
A python file with one long list of all the 4x4 latin Cubes. See Read Me: ListofLatinCubes.py for more details.

ListOfTuples.py
A python file that takes in **ListofLatinCubes.py** and **PartialLatinSquares.py** and looks for triplets that satisfy the N alg axioms. An N algebra will be stored as a tuple of [latin cube, latin cube, latin square]. The first cube is an [,] tribracket, the second cube is the <,> tribracket, and the square is the product.

NAlgList.txt
A text file containing all 4x4 virtual N algebras with a partial product missing 6 entries.