	Method
1	Grouping Name Definition
2	Assignment 'l_strStockSolutionName' = '"Stock Solution"'
3	Assignment 'l_strDiluentName' = '"Diluent"'
4	Grouping
5	Grouping Unit Definitions
6	Assignment 'l_strUnitOfConcentration' = '"µM"'
7	Assignment 'l_strVolumeUnit' = '"µL"'
8	Grouping
9	Assignment 'l_fltVolumeMaxOfLabware' = '1500'
10	Grouping Values Definition
11	Assignment 'l_fltConcentrationOfStockSolution' = '1000'
12	Assignment 'l_fltSerialDilutionInitalConcentration' = '"500"'
13	Assignment 't_fltDilutionFactor' = '2'
14	Assignment 'l_fltFinalDilutionVolumeNeeded' = '500'
15	Assignment 'l_intNumberOfDilutions' = '10'
16	Grouping
17	User Input Dialog Title: '"Needed information"', Return Value: '', Buttons: 'Only 'OK' button', Default: 'OK', Sound: '', Timeout: 'infinite' Input: l_strStockSolutionName ("Stock Solution: ", String, "") l_strDiluentName ("Diluent: ", String, "") l_strUnitOfConcentration ("Unit of Concentration: ", String, "") l_strVolumeUnit ("Unit of Volume: ", String, "") l_fltVolumeMaxOfLabware ("Max Volume of Labware: ", Float, 1) l_fltConcentrationOfStockSolution ("Initial Stock Concentration: ", Float, 1) l_fltSerialDilutionInitalConcentration ("First Dilution Concentration: ", Float, 1) t_fltDilutionFactor ("Dilution Factor: ", Float, 1) t_fltFinalDilutionVolumeNeeded ("Final Volume Needed: ", Float, 1) l_intNumberOfDilutions ("Number of Dilutions: ", Integer, 4, 4, 24)
18	Grouping Math Calculations
19	Assignment with Calculation 't_fltVolumeToTransfer' = 't_fltFinalDilutionVolumeNeeded' / 't_fltDilutionFactor' result as floating point number
20	Assignment with Calculation 't_fltMaximumVolume' = 'l_fltFinalDilutionVolumeNeeded' + 't_fltVolumeToTransfer'
21	Assignment with Calculation 't_fltVolumeOfDiluentToAddToWells' = 'l_fltFinalDilutionVolumeNeeded' - 't_fltVolumeToTransfer'
22	Assignment with Calculation 't_fltNumeratorOfInitialVolumeTransfer' = 't_fltMaximumVolume' * 'l_fltSerialDilutionInitalConcentration'
23	Assignment with Calculation 't_fltStockToFirstDilutionTransferVolume' = 't_fltNumeratorOfInitialVolumeTransfer' / 'l_fltConcentrationOfStockSolution' result as floating point number
24	Assignment with Calculation 't_fltDiluentToFirstDilutionVolume' = 'l_fltFinalDilutionVolumeNeeded' - 't_fltStockToFirstDilutionTransferVolume'
25	Grouping
26	Assignment 't_fltMaximumVolume' = '1000'
27	If, Else (t_fltMaximumVolume is greater than l_fltVolumeMaxOfLabware)
28	User Output Dialog Title: '"Error"', Return Value: '', Buttons: 'Only 'OK' button', Default: 'OK', Icons: 'Display information message icon', Sound: '', Timeout: 'infinite' Output: "ERROR: VOLUME EXCEEDS LABWARE MAX VOLUME"
29	Else
30	User Output Dialog Title: '"Result of Calculations"', Return Value: '', Buttons: 'Only 'OK' button', Default: 'OK', Icons: 'Display information message icon', Sound: '', Timeout: 'infinite' Output: "Move ", t_fltStockToFirstDilutionTransferVolume, l_strVolumeUnit, " of ", l_strStockSolutionName, " and ", t_fltDiluentToFirstDilutionVolume, l_strVolumeUnit, " of ", l_strDiluentName, " to first well.", "", <New Line>, "", <New Line>, l_intNumberOfDilutions, " Dilutions will be made by first adding ", t_fltVolumeOfDiluentToAddToWells, l_strVolumeUnit, " of ", l_strDiluentName, " to each dilution except for the intial dilution which should already be made. Then from the first dilution to the last dilution move ", t_fltVolumeToTransfer, l_strVolumeUnit, " to each next dilution changing tis every time, and making sure that the solution is mixed before moving the aspirated liquid to the next
31	End If
32	