Assignment 04 – Pep/9_0 Ordering (Due: Friday April 12, 2024)

Assuming that you have successfully completed Assignment 03, as a warm-up, you should now be ready for some more involved assembly language programming in Pep/9_0.

For this assignment you are to modify and extend the given `NegPosA.pep` source program, renaming it `NegPosAS.pep`, such that it stores the values in the `Neg` and `Pos` arrays in ascending order. This ordering of the values is to be accomplished using an "insertion approach", meaning that each value added to the array is to be placed in its proper position at the time it is inserted. There are, of course, other approaches that may be used, but using this approach better accomplishes the goals of this assignment.

Consider the following two screen shots, showing the execution of the given `NegPosA.pep` and my solution for the `NegPosAS.pep` programs. Note that both the column of negative values and the column of positive values are presented in ascending order in the revised program.

As your work on this assignment, you are to submit each of the following to the AS04 DropBox on Brightspace:

`NegPosAS.pep`	The modified source program, **with identifying and explanatory comments added.**
`LastFM.docx`	A concise report of the results of your work on this assignment, in which you explain what you have done. I encourage you to convey this by presenting the two source programs side-by-side with the modifications highlighted and annotated. This document must contain a screen shot of the IDE that shows both; the "Source Code" pane and the "Output Pane"; similar to what is shown in the document. The file is required to be a MS Word readable document file, to be named in the following form, `LastFM.docx` (where `Last` is your Last Name, and `F` and `M` are your First Name and Middle Name initials; such as `JackowitzPM.docx`, and `SmithJ.docx`).

Good luck,

P.M.J.