"You are not allowed to use Modelbuilder": When Instructors need to get smarter

This post was inspired by the thread in GeoNet ... https://geonet.esri.com/thread/116880 entitled **I'm a student and I need a python script that i can use for ArcMap** where apparently Modelbuilder...the natural choice...was not permitted to generate a script for working in ArcMap.

I usually suggest that my students use Modelbuilder to build workflows, then they can modify the script for general use with the existing, or other, data sets. I personally don't use Modelbuilder, but I have used one of two methods to generate the needed workflow

Method 1 Do it once...get the script...modify and reuse

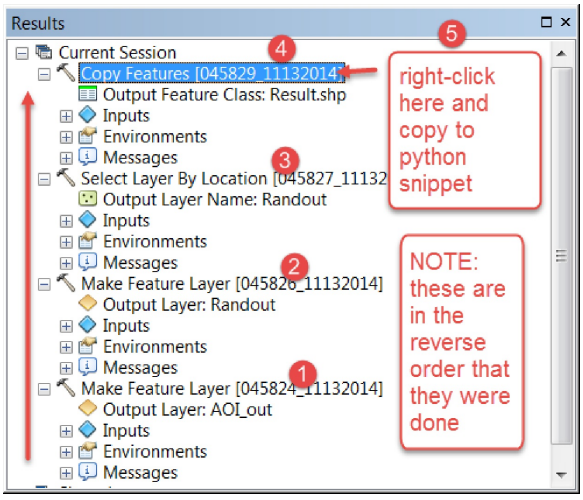
The following is a workflow that creates 2 feature layers, performs a select by location, then copies the results out to a new shapefile.

1 Start with a blank project. Have your data files assembled and open Arctoolbox and the Geoprocessing Results window.

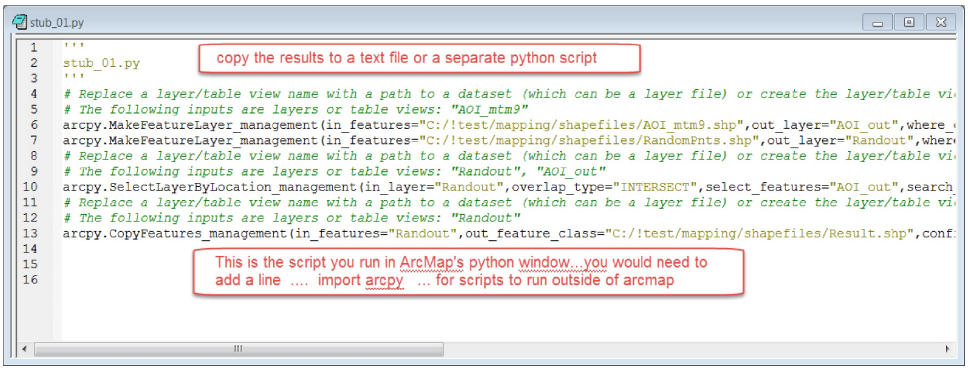
2 In arctoolbox, go through the steps manually. After each step copy the results to a python snippet. The steps I performed are shown in the figure to the right.

You will note that the processes shown are in the reverse order that I performed them.

After each ArcToolbox tool was used, I right-clicked on the process (eg. Make Feature Layer) and copied the results to a separate text editor, or in my case a python script within your favourite Python IDE.

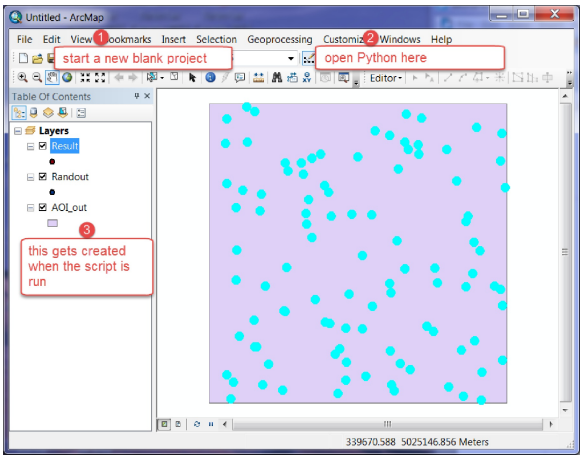


3 The results are:



4 Save your script (e.g. stub_01.py in this example), close ArcMap, re-open a blank project and open the Python window in the Geoprocessing menu. Right-click within the window, select **Load** and navigate to where you saved your script. Follow the steps in the image below:

"Automagically" you will end up with this.



And who said all instructors were cleverer than there students! (Or all instructors haven't thought through their requirements thoroughly :))