Search for the problem, not the solution.

1. I just wrote it and it doesn’t work.
   1. I’m getting an error message, but I’m not sure what the error is.
      1. Look it up online. Do you see anything that sounds right?
      2. Start debugging.
   2. It’s not doing what I want it to.
      1. Start debugging
      2. Could there be differences in your data? (some rows aren’t formatted the same way as others, you have missing data in some places that you didn’t notice, distributions vary, etc.)
         1. Try using print statements inside loops to see if every row looks the same. You might print the actual data, or lengths of rows, something to look for differences.
         2. Try creating a shorter version of your dataset with only a few rows – does that work the way you want?
2. It used to work, but now it doesn’t.
   1. Did you change anything in the code recently?
      1. Start debugging just above the changed code.
   2. Are you using a different data set?
      1. Look at the raw data - how is the new dataset different from the old?
      2. Try using print statements inside loops to see if every row looks the same. You might print the actual data, or lengths of rows, something to look for differences.
      3. Try creating a shorter version of your dataset with only a few rows – does that work the way you want?
   3. Are you running it on a different system? Local vs. server, script vs. Jupyter notebook, local Jupyter vs. colab, new laptop, etc.
      1. Can you test it again on the old system?
   4. Has it been a while since the last time you ran it?
      1. Has Python or Anaconda updated?
      2. Has a package updated? (might not be the package that’s giving you an error – might be a dependency)

Debugging

Start at the top of the script or notebook. Write print statements or run the code in chunks (you can comment out code below inside a function) until you get the error.