

# Remember to use your DEBUGGING skills!

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Hello - You are getting close to the end of Week 3 and will soon be completing Assignment 3. This is a great time for me to remind you of the importance of debugging skills!

If a subroutine or function is not working properly, remember your debugging skills! It's not apparent by most learners when they first learn to program, but the Week 1 material on debugging is super important. In fact, *it's so important that there is a reason why I teach it upfront in Week 1!*

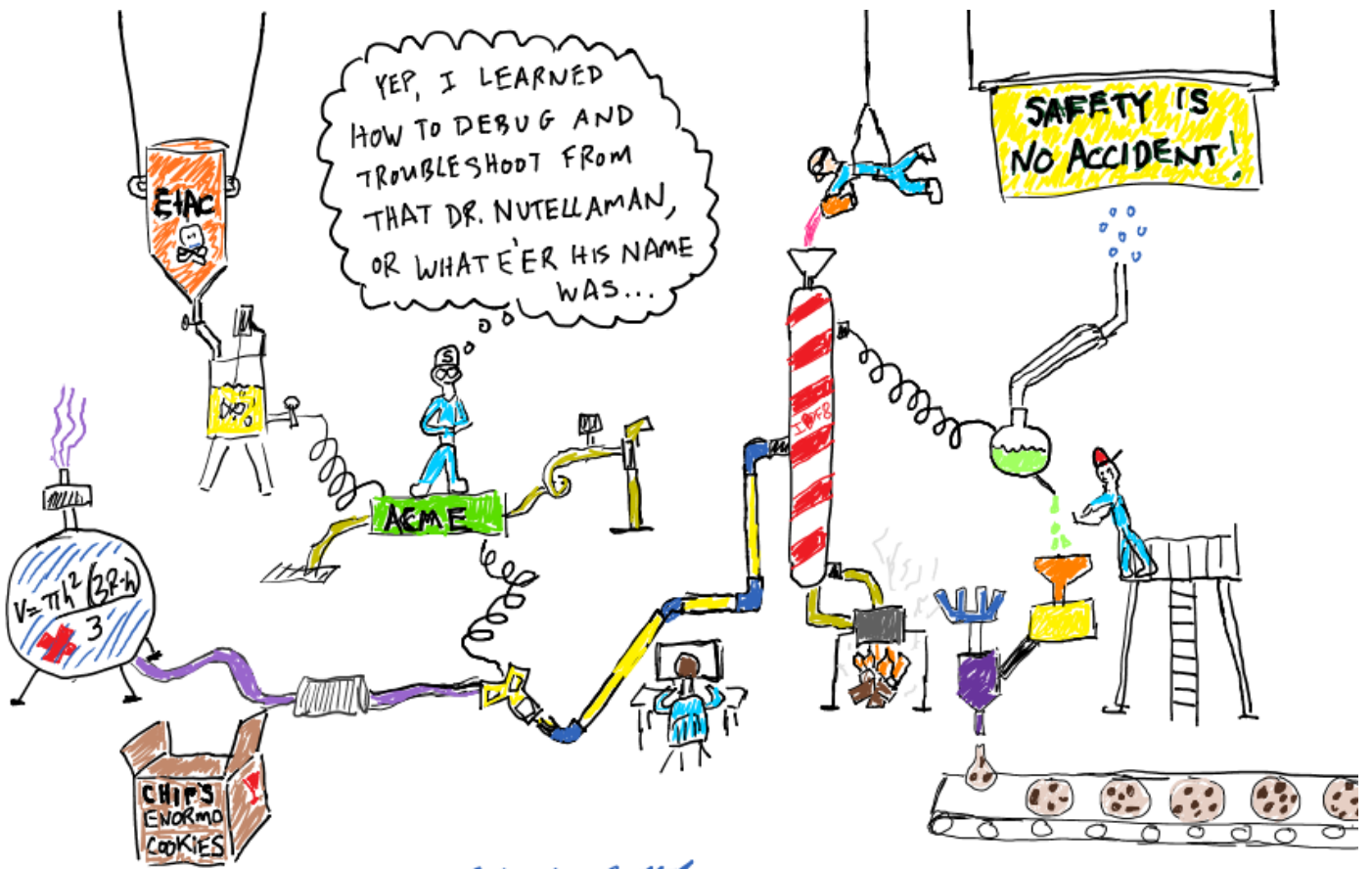
**It's like teaching a prospective pilot how to fix his/her airplane before teaching them how to fly!**

Debugging using F8 and the Locals window is the primary way that you can see what is going on "behind the scenes" or "in the brains" of the VB Editor. Look down in the Locals window and ask yourself, "Does that make sense?" It's not magic, in fact it's the opposite of magic because it is a very calculated, scientific, and deliberate process! Look at the values of all the variables/arrays as you go one line at a time. Go very slowly, one line at a time, possibly even writing things down on a piece of paper and/or doing hand calculations with a calculator to verify. This is how you can identify which line is giving you an error. Then, you can focus on that single line, fix it, and move to the next line.

So, you don't need an anteater to debug your code (haha, bad joke, I know) - you can do it yourself. Thanks, hope this helps!

Charlie

P.S. Many engineers use step-wise troubleshooting skills very similar to debugging techniques to figure out what is wrong with a complex process. Troubleshooting and debugging are paramount to many engineering and computing disciplines!



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