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Unix Programming

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Report

While creating my interactive text processing tool I've had some hurdles. One of the hurdles was how I wanted to structure my code to make it interactive. I know it's easy just to make a code where you can ask it to do anything in one line, but I wanted to make sure the user could see all the options and could choose while being able to see a menu. Another hurdle I had was how to incorporate the codes Awk, Sed, and Grep within my code. Lastly, I also had trouble choosing how my code would find the file. I could've had the program look for the file or made the user give the program a certain file. In the end, I was able to make my decision by how I wanted my program to work and how simple the program should be.

Most of my hurdles were solved by doing a ton of research. First, I had to refresh my brain on what Awk, Sed, and Grep did within Linux. Once I was able to understand what all three programs did, I was able to figure out that I was going to create a menu for the user to use and navigate what the user wanted the program to do. I used the case function to create an option for each of the options that the user could use to find something within a file. I figured this was easier and more helpful to the user. This also helped me realize that it would also be easier if the user would just input the file to find what the user wanted within the file. This would allow me to not create complications in finding files with similar names.

The next step for my program now is creating a sample text file and testing each option to make sure that the program is doing what it is supposed to do. I could also try to make sure that my code has notes within it to make sure that if the user wants to see the program, they understand what is going on. This does not only help me but the user as well.

	Apr 10 – Apr 17	Apr 17 – Apr 24	Apr 24 – May 1
Situation	Not knowing what the codes Awk, Sed, and Grep mean	Figuring out what codes I need to use within my code.	Putting the code together.
Task	Research the codes and write down notes.	Rereading what I want my program to do and doing research to find the programs I need	My task this week was to put everything I know to put my code together.
Action	Learned what Awk, Sed, and Grep meant and what they did	I went on geeksforgeeks.org to find examples of codes and understand how to use them.	Went onto putty and started building my code together and many trail and errors.
Result	Awk scans for patterns in each line. Mostly used for processing and pattern matching. Sed is used to replace old text with new text. Easy way to replace certain words in files with other words. Grep finds patterns within each line and then prints them which is useful finding patterns within a line.	I was able to figure out the codes I needed which were awk, grep, sed, wc – l and wc –w. I also needed if, while, and case functions within my code.	I was able to finish the code and created a sample text file to test out my program. I was also able to upload it to my repository on GitHub.