~~1) Introduce yourself~~

~~2) Show/demonstrate how your script works in matrix~~

~~3) Explain your code, how you design it  and how it works~~

~~4)Speak about challenges that you faced.~~

~~5) Have you implement all requirements of the assignment2? how do you evaluate yourself out of 10 for this assignment?~~

Hello, This is Khai Phan, StudentID 100-901-168 and I am in DPS918 class. Today, I will be demoing my Assignment 2 code and result. On the left side of my screen is the command terminal where I will be running the code and the right side is the result example. So I will get the code running right now.

So as per the example, we are suppose to check for file correction as well as number of argument. So here is how the result is.

After that, I am going to check if the information line moving correctly as I am moving up and down the display. So as you can see, it is working good, but there is still a bit of flicker on the screen and I wasn’t able to figure out how I should do it. I might try it on the Assignment 3 as it is based on this one.

I think that is it for the display, and now is back to the code part. So at line 18, I have a trap statement that will be use when the user hit Ctrl+C. It will execute and put the format back to normal. Moving next is where I will handle the number of arguments and filename existance, in between line 21-30

Next one is the tough part. First, need to create an array of directory to store the layer level from where I am to home directory. I will use the count variable to read the number of layer. currentLevel is to monitor the level layer I am in at the moment. Current column will be where I place my cursor is. Col will be a 2 dimensional array. I was looking up at one of the online tutorial where it shows me how I can place the cursor in the certain position of the line. I was just testing to see how it works and forgot to remove it as we do not need all of them. I will explain the currentCol and col later on in the code.

Moving next is where I will store the directory list (extracted from the absolute path from home to where I am currently in) and store each layer level name in the directory array for display later on.

Then next is the icanon to make the key press work right away without pressing enter, and -echo is to hidden the word. Then is just the header display with fixed positioned.

Next part is the permission spacing. I will take the permission in each of the directory layer and add the spaces in as per requirement require. The part from line 60-63 is to do the permission spacing for root directory, where it will almost never change. Since the rest of the part can likely be change, for example to another user or another directory, I will handle it later on in the for loop.

Next is just a command menu legend for user, display at the 2nd end of the screen (leave the end line for exit status). Then I set the position for the last available line of display where it will print the information about that directory. The last directory available will be count as the largest currentLevel value.

Last part is the while loop, where it will handle the cursor moving position up and down between line 84-88. Then there will be a case command to handle operation on what should happen when user press one of the key. Take control u) for example, when user press the u which is for up button, the tput cup will move the information line 2 position above, tput el will ensure the previous line is removed and only one information line display at a time. It also change the currentLevel and from line 98-104 is where I will handle the information part.

There are a lot of challenge for this part, especially is the information line moving between each of the layer level. I almost have to hard code on all of the position and I can’t figure it out at first. The first time I was trying, it can only move up one line by one line, and delete the information existed in that line. Also, the spacing between permission is difficult. Giving a space between character is easy, but know when to give 3 spaces is hard. Those 2 issues I have to search on the internet with some youtube helping to help me that. There is also one part where I suppose to put the cursor at the beginning of the file name. I had to test it around the column of the line to see how it actually works.

I’ve implemented most of the requirement I believe, except for the flicker which I didn’t really have much time left to work on it. Out of 10, I would rate myself at 7, considered I have 5 more courses going along, so I didn’t really have much time to work on it.