The most trouble I had while making this script was using Codio. After submitting it in Codio, I used VSCode and worked on updating it. I defined the rental charge variables at the top of the script, so they were quickly accessible to change later if prices change. I also defined two variables as one for extra miles and one for mile charge. Later in the script, both variables will get updated depending on the user input that defines the branch the script will go on. The branches (if and elif statements) are important because they change what happens depending on user input. Most of the errors I had were basic syntax errors. I used VSCode to debug my script.

It is essential to know how and when to modify variables. In my script, two variables I update are mile\_charge and extra\_miles. I need to modify the variables to calculate the total charge for the rental. Both variables will get updated depending on the user input that defines the branch the script will go on. If I were unable to update these variables, I would waste memory, time, and lines of code.

In my script, I have five different branches. The first three check if the user inputs a B for budget, D daily, and W weekly. I will explain one branch and why it is used, The second branch one checks if the user input is equal to the letter D. To handle issues if the user puts a lower case D, I used the .upper method on the user input. If the User input D, the user will get prompted to enter the number of days the vehicle was rented. The branches for my script are vital because they branch down to different possible solutions. For this script, the possibilities are a budget rate, weekly or daily with the add on of additional mileage charges. Without branching, the solution would not be as clean.