To begin I started with making a grocery class that includes all the menu options and one for sorting the data. In main I call the purchases so that it can begin opening the files, sorting the data, and writing the data to a backup .dat file. After that I create a for loop that iterates all the menu options until the user decides to exit the program. Inside each menu option I include the required functions. For the menu option 1 the user needs to enter an item, this may cause an error because in the text file the first letter is always capitalized, so I made it so it capitalizes the users first letter if they didn’t, see a screenshot. Additionally, I needed to create a .h file to define what's going to be public and private to meet the requirements. Ive decided to include my vector that stores the data as private. In menu option 2 I output the sorted data in alphabetical order with the frequency next to each item. In menu option 3 I also made the histogram output as required in the rubric see screenshot. And then the menu option 4 exits the program. All these will be in a while loop iterating until user enters 4. 