For Project Three, I’ve used the CornerGrocer class to organize all the data and functionality of the program. Inside the CornerGrocer class, I have three private data members:

* `inputFile`: This is a global variable that holds an input file stream, which can be used by member functions to read data from the file.
* `InputFileName`: This is the name of the file that we are going to read.
* `productFrequency`: This is a container that holds the product name and its frequency in the file.

The CornerGrocer class also contains two private functions that can be called from within the class by other public functions or constructors.

* `openFile`: This is a private function that is called from other public or private functions to open the file for reading.
* `createBackUp`: This private function is kicked off by the constructor itself in the beginning of the program without user intervention. It outputs `frequency.dat` file that contains the product name and its frequency seperated by a comma. Additionally, this private function populates the `productFrequency` map by incrementing the product frequency for each product that is added to the map.

The CornerGrocer class also contains four public member functions that are called from the main function to perform different tasks:

* `displayMenu`: This function simply displays the menu for the users to decide.
* `printWordFrequency`: This function checks the already populated map for a user input and its frequency and prints the frequency if found.
* `printFrequencyList`: It iterates through the `productFrequency` map to print the list of products and their frequencies.
* `printWordFrequencyHistogram`: This function iterates through the `productFrequency` map, like `printFrequencyList`, but it has a nested loop to print a histogram based on the frequency.

Finally, I also have the `main()` function. Within the `main()` function, an object is created by passing an input file to the CornerGrocer constructor. It also displays the menu and asks for user input. It uses a switch statement to call public functions from the CornerGrocer class based on the user input.

*Std::Map::Find*. cplusplus.com. (n.d.-b). <https://cplusplus.com/reference/map/map/find/>