The project goal was to create a program that generated CSV files with Shrimp, Fish, Crabs, and Scallops. The CSV file was to record their weights, type, price, and index number. My implementation of this problem uses variables specified in the main method to build various types of these CSV files. I let my users specify the maximum weight that is generated, and the different selection weights of each individual type.

My fishMarket program creates 2 constructors. One without the weight parameters and one with. You can call either constructor and get the proper CSV file assuming all the other parameters are specified (see Javadoc for exact parameters). The constructor sets global variables and calls the private generateSeafood method. This method will randomly generate a seafood type, weight, and pass the price into the constructor of the class it belongs to. The method considers the weighted selection parameters if they’re specified and will repeat the adding process for the seafood subtype n number of times. The result is that if a fishWeight is 5, it will generate a fish 5 times every time a fish is initially chosen. This results in the fish being generated 5 times as much as every other subtype

The constructors then call generateCSV. This method takes the filename as a parameter and goes along the process of creating or overwriting a file and writing all the data to it. It uses a BufferedWriter for speed. This method iterates over every item in the array list and uses a method in Seafood to write the data about the object on its own line. This method closes both writers. The method has a try/ catch block that will print a short method to console if the file is open elsewhere or there is no write permission to the directory.