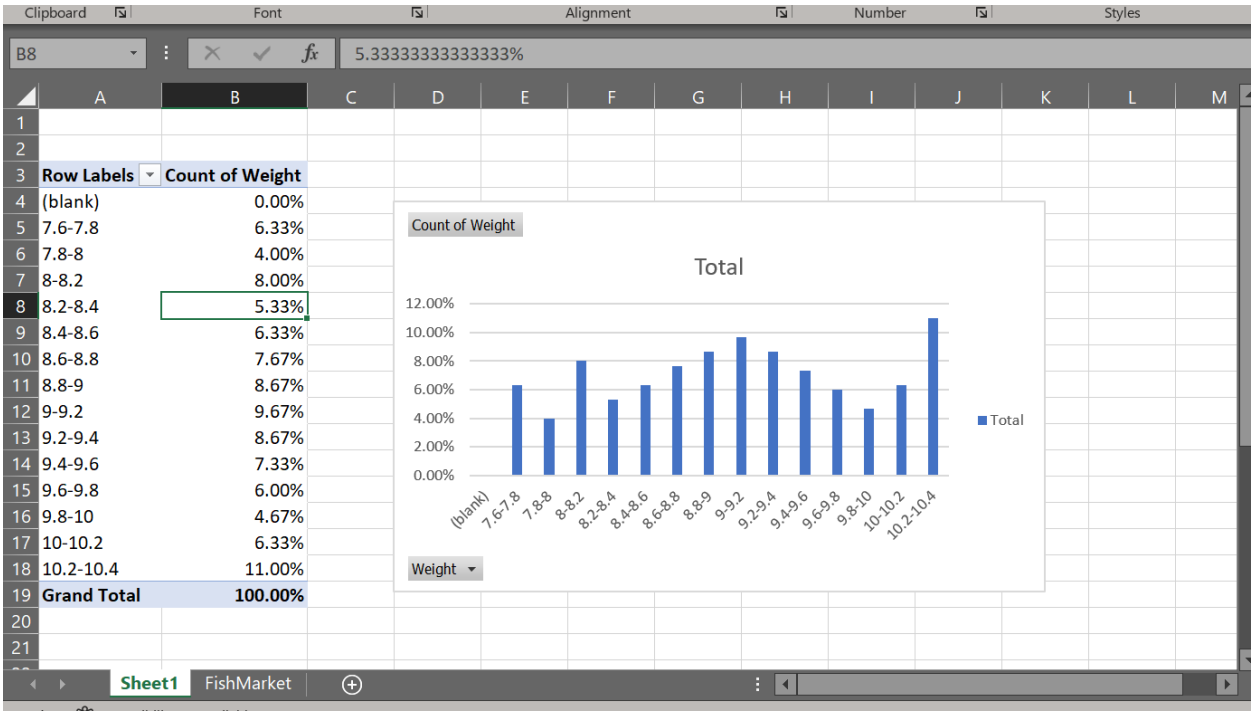
A Report on The Fish Market Program: Analysis on How the Price Per Pound Differs in Various Types of Sea Food

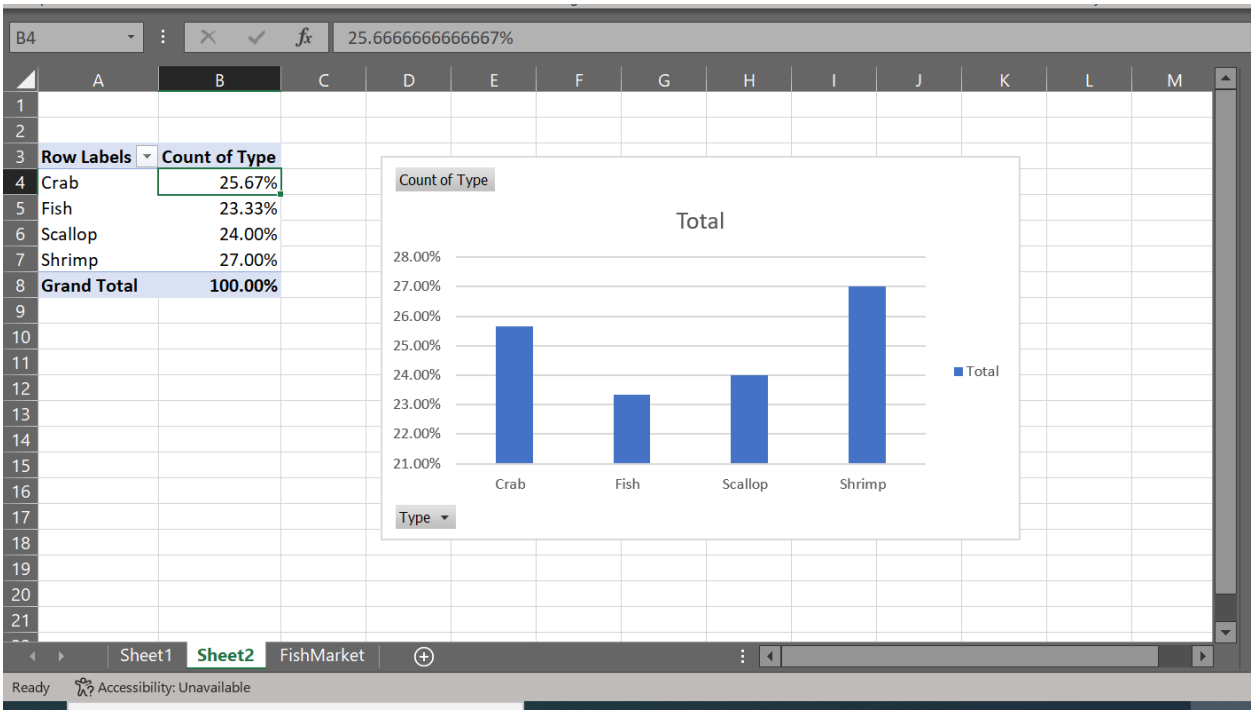
Introduction: "Rising seafood prices due to inflation continue to cause concern among the entire industry, including retail and foodservice buyers. Frozen seafood prices experienced the biggest gain in the second quarter of this year – up 9.2 percent versus the same quarter in 2019 to USD 6.96 (EUR 5.95) per pound on average in U.S. grocery stores and mass retailers, according to IRI and 210 Analytics. Frozen prices also grew 3.2 percent in the quarter versus 2020" (Blank, 2021). Despite the soaring prices, sea food is still in high demand in the United States and according to the Food and Agriculture Organization of the United Nations (FAO) website, USA overtakes EU as the top importer of Shrimp. "International shrimp trade showed strong recovery in 2021 following reopening of the restaurant and hospitality sector in North America and Europe." (FAO, 2022). This takes precedence with the return to normal following the aftermath of the covid 19 pandemic.

Method: This program is run in Java and entails the creation of two classes. One for the Fish Market and the other one for the Sea Food. For this application, a sample of five different types of sea food will be used to provide an illustration of how the weight is randomly generated but the price is fixed per type. The various types of Sea Food are constructed in the Fish Market class and a random generator is called from the Random class, to produce names of the sea food types and allocated the data output with a random weight in pounds. In the case of this program, three hundred seafoods are generated as the sample size. The price per pound stays the same with the specific type. Buffered Reader class is imported from the java.io package and its prime use is to export the randomly generated data as a csv file that can be opened in Microsoft Excel.

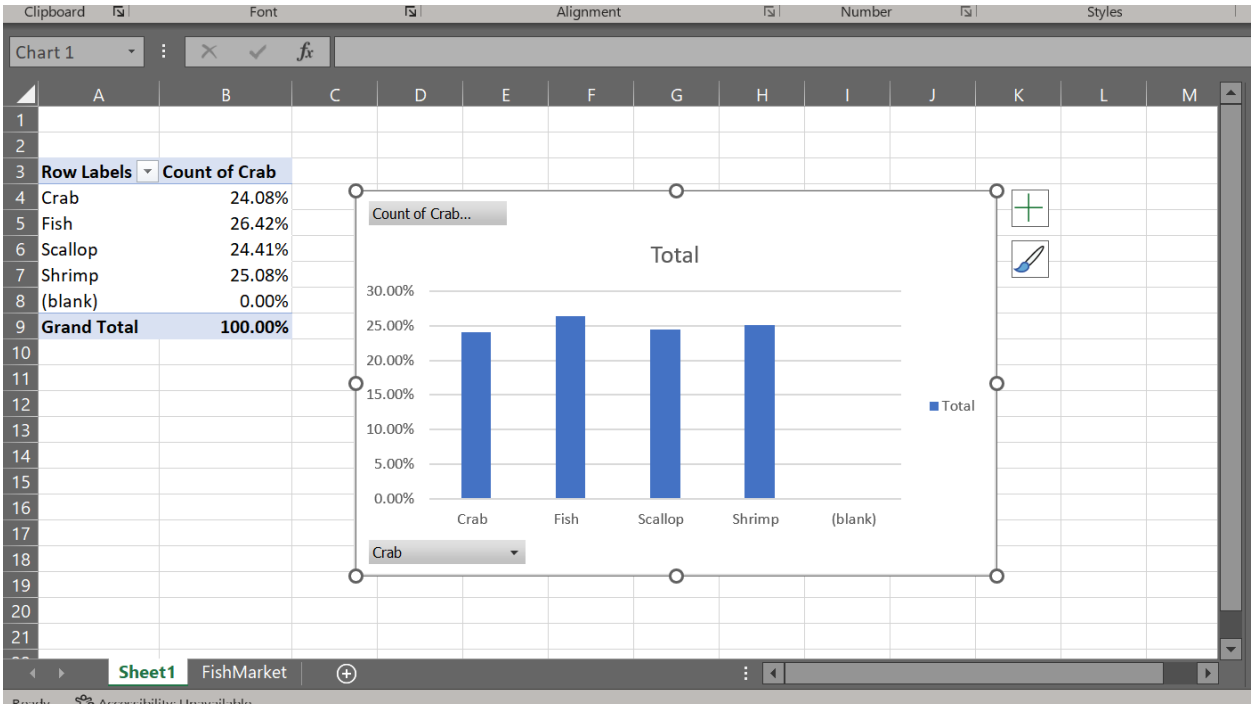
Results: The graph below shows the weight in a Histogram and what we can extrapolate from this, is that there is a higher percentage of seafood between the ranges 10.2 to 10.4.



The second graph is based on the count of types of seafood, and it is evident that Shrimp has a higher count compared to the rest.



When the program is adjusted such that, Weights is added to the seafood generator so that more fish is caught and less Scallop and Crabs, the outcome is displayed below with Fish having a higher count percentage compared to the rest.



Conclusion: Based on the graphs, I have elaborately demonstrated how the Fish Market program can be used to generate random weights and assign prices to different types of seafood. This is very vital in real world scenario especially in fields such as data analysis, where there is a sample data, and we need to examine it in excel and draw an hypothesis based on the graphs or whatever operation we choose to use on the attained data.

Literature Cited:

Blank Christine**, Concerns mount over rising US seafood prices** (July 23, 2021) https://www.seafoodsource.com/news/foodservice-retail/concerns-mount-over-rising-us-seafood-prices

FAO **Shrimp: USA overtakes EU as top importer** (04-10-2022) https://www.fao.org/in-action/globefish/market-reports/en/