Since the Covid-19 break out in Canada, I noticed that there are a lot of people in grocery stores, while the shopping malls like Richmond Center and Pacific Center have much less customers than before. It seems that people are more willing to go shopping for grocery rather than other goods. In my final project, I will analyze the influence of Covid-19 on retail sales and wholesales sales from September 2019 to September 2020 in a monthly basis.

The data of Covid-19 cases comes from the website of our last assignment. The data about retail sales and wholesales sales are from Statistics Canada. I will divide this assignment into 6 parts to get the result step by step.

Part1&2 : I will make line charts for Covid-19 cases, retail expenditure and wholesales respectively.

Part3: I will combine Canada country-wide wholesales data and Covid-19 cases to one table, then run a linear regression and check the result.

Part 4: I will pick few different industries in wholesales as dependent variables to run the regression several more times, and then compare the coefficient and significance.

Part5: I will combine province-level retail sales data and Covid-19 cases to one table. Then use this panel data to run another linear regression.

Part6: I will try to put more independent variables into the regression model to see if it makes changes to the significance of coefficients. Independent variables may include a dummy variable for festivals, or other related variables which have available monthly data.

Reference: <https://www150.statcan.gc.ca/n1/pub/62f0014m/62f0014m2020005-eng.pdf>