COMPUTER PROJECT

MAS291

In this project, you are required to work in a group and present your work to the class.

Each group will look for **secondary data** (about housing, finance, health,... or any topic of your choice), then use **Excel** to perform inferential statistics on the data to obtain useful information.

More specifically, you are required to apply all of the following techniques on your data:

- 1. Test a hypothesis and construct a confidence interval for the mean of a population.
- 2. Test a hypothesis and construct a confidence interval for the proportion of a population.
- 3. Test a hypothesis and construct a confidence interval for the difference in means of two populations.
- 4. Test a hypothesis and construct a confidence interval for the difference in proportions of two populations.
- 5. Regression analysis. In this requirement, you are expected to complete the following steps:
 - (a) Identify two random variables X and Y in your data.
 - \rightarrow For instance, X= height, Y= weight.
 - (b) Construct a scatter plot for the data. Do you observe a linear relationship?
 - (c) Compute the sample correlation coefficient.
 - (d) Find the equation of the estimated regression line, and use it to predict a future value for Y.