# Practical 3 – CP2403 - Due 7 Dec 2019 (Saturday, 5pm)

# (Please ensure you show your work to your tutor once completed as each prac is 3 marks.)

**Part 1** – Download the Jupyter notebook for Module 3 and run the notebook

**Part 2**

Ensure you have completed Prac 1 and Prac 2.

Download the Jupyter Notebook Template for Prac 3 from LearnJCU. Complete the template & run the code. Refer to Module 3 Lecture Jupyter Notebook for help

Complete the questions in Part 3 as you work on the Prac 3 template. Upload the template and your answers to Part 3 to LearnJCU for marking. Name your Jupyter Notebook as **CP2403-Practical3-FirstNameLastName** for submission**.** Refer to Module 3 Lecture Jupyter Notebook for help.

**Part 3**

1. What is the conclusion can you draw from the bar chart about beer dependence in the past 12 months (S2BQ1B1) among adult drinkers?

**The bar chart showing that most of the data of adult drinkers is not beer dependence in the past 12 months and there is only around 100ish data or adult drinkers is beer dependence.**

1. What is the conclusion can you draw from the histogram about the number of beers consumed per month (NUMBEERMO\_EST) among adult drinkers?

**Based on the histogram the data shows that most of adult drinkers are not assuming any beer and the data is right skewing with huge fall to around 1000 adult drinkers consume at least 1 beer and keep falling.**

1. What is the count, mean, std, min, max, median and mode of about the number of beers consumed per month (NUMBEERMO\_EST)?

**Count: 7303 , mean : 27.765713 , std: 49.201312 , min:1 , max: 900, median: 12, mode: 0**

1. What is the conclusion can you draw from the bar chart about relationship between the number beer cartons consumed per month (CARTONCATEGORY) and beer dependence in the past 12 months (S2BQ1B1) among adult drinkers?

**From the chart the relationship on the number carton consumed per month and beer dependence in the past 12 month among adult drinkers is shows that most likely 30-37 carton consumed per month have beer dependence and the less carton consumed per month have lower proportion beer dependent.**

1. What is the conclusion can you draw from the bar chart about relationship between the number beer cartons consumed per month (CARTONCATEGORY) and ethnicity?

**Based on the bar chart the relationship between beer carton consumed per month with ethnicity is Black ethnicity is most likely to have higher proportion of drink beer a carton a day drinker and followed by Nat Am, White, Asian and the lowest is Hispanic ethnicity**

1. What is the conclusion can you draw from the box plot about relationship between age and income among adults?

**From the box plot the relationship between age 26-50 and income is most likely the older the person was they have higher incomes with.**

1. What is the conclusion can you draw from the scatter plot about relationship between urban rate and internet use rate?

**From the scatter plot the relationship between electricity use per person and oil is positive every person that consume 1 oil is most likely to use at least around 0 – 2000 electricity and most of the data also shows that if they don’t use any electricity they don’t use any oil as well.**