# Practical 6 – CP2403 – Due 28 Dec 2019 – 5pm

Ensure you add you name to the top of the Jupyter notebookbefore submission

**Part 1** – Download the Jupyter notebook for Module 6 and run the notebook

**Part 2**

Ensure you have completed Prac 1, Prac 2 and Prac 3.

Download the Jupyter Notebook Template for Prac 6 from LearnJCU. Complete the template & run the code. Refer to Module 6 Lecture Jupyter Notebook for help

Complete the questions in Part 3 as you work on the Prac 6 template

**Part 3**

**Scenario 1**

We want to find out if the rate of beer drinking frequency (BEER\_FEQMO) is related to beer dependence (S2BQ1B1)

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| **Step 1: hypothesis** |
| Null hypothesis (Ho):  There is no relation the rate of beer drinking frequency to beer dependence between adults in age between 26 to 50 who consumed beer in the past 12 months. |
| Alternative (Ha) hypothesis:  There is a relation the rate of beer drinking frequency to beer dependence between adults in age between 26 to 50 who consumed beer in the past 12 months. |
| **Step 2: Data Selection** |
| **Adults Age between 26 to 50 who have consumed beer in the past 12 months** |

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| **Step 3: Assess the evidence** |
| Cross Tab  A screenshot of a cell phone  Description automatically generated |
| Cross Tab (%)  A screenshot of a cell phone  Description automatically generated |
| χ2  A screenshot of a cell phone  Description automatically generated |
| **Step 4: Draw Conclusion** |
| Based on the data it is rejecting that there is no relation but the data shows that there is a relation between the rate of beer drinking frequency to beer dependence for adults in age between 26 to 50 who consumed beer in the past 12 months |
| **Bar chart of frequency of beers consumed in a month (BEER\_FEQMO) for individuals who have beer dependence (S2BQ1B1)** |
| A screenshot of a cell phone  Description automatically generated |
| **Post-hoc analysis results** |
| **A screenshot of a cell phone  Description automatically generated**  **P<0.05/21 data = 0.0023** |
| **Post-hoc analysis conclusion** |
| Based on the data most of them are beer dependence for adults in age between 26 to 50 who consumed beer in the past 12 months so below are the data that are not dependence:   * 1 versus 2.5[Once a month compared to 2-3 times a week] * 1 versus 4[ Once a month compared to once a week] * 2.5 versus 4 [ 2 to 3 times a month compared to once a week] * 4 versus 14[Once a week compared to 3-4 times a week] * 8 versus 14 [ 2 times a week compared to 3 -4 times a week] * 8 versus 26[2 times a week compared to nearly every day] * 14 versus 26[3-4 times a week to nearly every day] * 26 versus 30[nearly every day compared to every day] |