**In-Class Exercise – “Wilcoxon Signed Rank Test”**

Due Day: 2022/04/18, 23:59

Objective: To understand how to write Wilcoxon signed rank code and get the result of p-value.

Explanations：

1. Use the course content to do practical exercises about the Wilcoxon test.

|  |
| --- |
| **% Wilcoxon signed rank test**    clc;  clear all;  close all;  % see Wilcoxon Test Lab Session PPT page 4 to complete the code  % and adjust to which samples that will be used  % load csv file  **group1** = load **(%groupSample1);**  **group2** = load **(%groupSample2);**  % see Wilcoxon Test Lab Session PPT page 5 to complete the code  % performing wilcoxon signed rank test based (**small** sample size)  % method : exact  [p,h,stats] = signrank**(group1,group2**,'method','%methodExact'**)**  % method : approximate  [p2,h2,stats2]= signrank(**group1,group2**,'method','%methodApproximate')  % performing wilcoxon signed rank test based (**large** sample size)  % method : exact  [p3,h3,stats3] = signrank**(group1,group2**,'method','%methodExact'**)**  % method : approximate  [p4,h4,stats4]= signrank(**group1,group2**,'method','%methodApproximate') |

1. Use MATLAB to run the code and add screenshots to report in Word files.
2. Compress(.zip,.rar) the following file with the name of the group ( e.g. group\_1.zip)
   * 1. Code(\*.m)
     2. Report(\*.doc)
        + Result of **exact** and **approximate** (p-value[**p**] and decision[**h**]) from small and large sample size.
        + Conclusion of result.
          - Compare the hypothesis result from exact and approximate method from **small** sample size
          - Compare the hypothesis result from exact and approximate method from **large** sample size
          - Analyze if there is **different hypothesis result** from different method

Note：

1. Each group, one report
2. Upload the file before 23:00 on the same day on e-Learning site (<https://ncueeclass.ncu.edu.tw/dashboard>) to complete.