Exam 2 - R Section

1. **You have to submit the R programming files and all figures.**
2. You are not allowed to communicate with anyone else in person or online.
3. Do not manually process the data on the original files as it will not be credited.

# R Problem 1

In the file “R\_problem1.csv”, you are given the observations every day where you take seven measurements for twenty days.

1. Develop R codes to read the file, do data preprocessing if necessary, establish reliable and charts.
2. Save the R codes and the control chart figures, named with “R1-code-[your name].R” and “R1-xbar-[your name].png” and “R1-R-[your name].png”.

You are supposed to upload one file for R coding and two files for the control charts.

# R problem 2

In the file “R\_problem2.csv”, you are monitoring the defective cells of PV panels from samples taken from different lots. The data has variable sample size due to the variable size of the lots.

1. Develop R codes to read the file, do data preprocessing if necessary, establish reliable chart, reliable chart and reliable chart.
2. Save the control chart figures under both settings in (a), named with “R2-code-[your name].R” and “R2-p-[your name].png” and “R2-np-[your name].png” and “R2-u-[your name].png”.

You are supposed to upload one file for R coding and three files for the control charts.