Assignment 3	You should submit the assignment in a pdf format. For the data analysis, any software can be used, but please make sure to submit the file that contains your analyses too. (Excel file or R codes, etc.).
Due Date: Feb. 8th, 2021	
Question A: 45% Question B: 45% Question C: 10%	

Bags Containers

VHS is considering ordering some containers which make the transportation of the blood bags collected from donors more efficient. These non-reusable containers will be delivered to VHS on a 3-days basis starting from October 1st, 2018. There are various types of the containers and VHS tends to order a specific version which is suitable for the bags used for "Whole Blood", "Platelets", and "Packed Red Cells". Due to the high inventory cost of the containers, VHS prefers to keep a low inventory of them. Each container has the capacity for 5 bags. Athmanathan is thinking to create a forecasting model to determine the number of containers required for the first period (October 1st - October 3rd, 2018).

A) Use historical data from July 1st to September 21st as the training data and September 22nd to September 30th as the testing data. Create a simple moving average forecasting model with 3 different values of N, and forecast the number of containers required for October 1st - October 3rd.
B) Create an appropriate AR model and forecast the number of containers required for October 1st - October 3rd.
C) Compare the results of (A) and (B) based on MAD and RMSE measures.