STAT 673 Homework 2 due Wed. Sept. 16

Show all work. Please work in Groups of 2!

1. p. 66, Problem 3.1 (a) and (b). Find the ACF ρ_k for k = 0, 1, 2, 3, 4, 5 for each of the models where the a_t is a Gaussian white noise process. Find the PACF for each of the above models. You do not need to plot the ACF and PACF for the above models.

2. p. 66, Problem 3.3 (a) and (b) (i.e. using 3.1 (a) and (b)).

When it says to calculate and study, you do not have to calculate the sample ACF and sample PACF by hand. Just compare the plots and the estimates from R (see Lab1) to your answers for Problem 3.1.

Let's all use set.seed(2) for this Homework before we simulate each of the time series (a) and (b, above!