Simulation Lab 6

1- Simulate 100 exponentially distributed random numbers with mean $1/\lambda$. Plot the random exponential variates for different. (Ex. $\lambda = 1$, $\lambda = 3.8$)

2- Write the algorithm for generating a Weibull random variate. Simulate and plot100 values for different alphas and betas.

3- Use Box-Muller indirect method discussed in class to generate 1000 N(0,1) random variates. Plot your results to show that the random variates match a normal distribution.

4- Generalize the above for any $(\mu ; \sigma)$