Review SAS rand functions and do loops

1. Generate 961 samples of size 625 random numbers from Beta distribution with shape parameters $\alpha = 0.5$, $\beta = 0.5$. For each of these 961 samples calculate the mean.
   a) Find the simulated probability that the mean is between 0.49 and 0.51.
   b) Find the mean of the means.
   c) Find the standard deviation of the means.
   d) Draw the histogram of the means.

2. Generate 961 samples of size 625 random numbers from a Pareto distribution with shape parameter $\alpha = 5$. For each of these 961 samples calculate the mean.
   a) Find the simulated probability that the mean is between 1.25 and 1.26.
   b) Find the simulated mean of the means.
   c) Find the simulated standard deviation of the means.
   d) Draw the histogram of the means.