Project No. 2

This project is a preamble for the next one dealing with random variables.

You are to generate 1000 random numbers in [0, 1] and obtain an exponential random variable with mean 5, representing the inter-arrival times of packets to a buffer. Then plot the probability density function of this random variable and determine the mean and variance. Subsequently obtain a Poisson random variable for the number of packet arrivals and plot the probability mass function. Similarly determine the mean and variance.