1. Find (derive) the expected value and variance for the following distributions:
   a. Bernoulli
   b. Binomial
   c. Poisson
   d. Geometric
   e. Exponential
   f. Pareto (cdf $F(x) = 1-x^{-\alpha}$)

2. Find the expected value for $X^2$, with $X$ being uniform and exponential rv.