CSCE 317 Spring 2016
Quiz 4
Assigned Tuesday, 16-02-09

1. This question is from the textbook (p.40 [M]).

   > Suppose we have a room full of n disks. Each disk indepen-
   > dently dies with probability p each year. How are the following
   > quantities distributed?

   (a) The number of disks that die in the first year **Answer:**
       Binomial (n,p)
   (b) The number of years until a particular disk dies **Answer:**
       Geometric(p)
   (c) The state of a particular disk after one year **Answer:** Bernoulli(p)

2. Here are the definitions of two kinds of variables: random variables,and
   variables in first-order logic. Which one is which?

   (a) An element of the domain of discourse **Answer:** FOL

   (b) A real-valued function of the outcome of an experiment **Answer:**
       random variable (p.37 [H])