Tik-61.183 Special course on information technology III
Randomized algorithms
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Exercises 3, due March 15, 2000

1. Complete last time's exercise 2.4: show that the given algorithm does indeed select a permutation uniformly.

   Set $X \leftarrow (1, 2, \ldots, n)$.
   Repeat for $i = 1, 2, \ldots, n-1$:
      Select a number $r \in \{i, i+1, \ldots, n\}$ at random.
      Exchange $X[i] \leftrightarrow X[r]$.
   Output X.