1. How many strings of 8 digits are there:
   a) if repeating digits is allowed?
   b) if repeating digits is not allowed?
   c) that start with 1, end with 0, and repeating is not allowed?

2. The CS department has 12 students available to play in an interdepartmental baseball game.
   a) Baseball requires 9 players on a team. How many ways are there to choose 9 students to form a team?
   b) The 9 positions on a baseball team are pitcher, catcher, first base, second base, third base, shortstop, left field, center field, and right field. How many ways are there to assign 9 students to play each of the nine positions?