**CS 451**

**Activity 11**

**[Linear Algebra]** During any given year, 20% of cable communication users become satellite communication users and 10% of satellite communication users become cable communication users (all other people use the same communication service). Let *Ct* be the number of cable communication users at the beginning of year *t*, and *St* be the number of satellite communication users at the beginning of year *t*. Use matrix multiplication to relate the vector  to the vector . (This is based on the problem 3 in the page 47 of the textbook.)