**Homework 4 (Due 2/6/03)**

5.2 **2(a), (c), (e).. After starting with a basic feasible solution do 2 iterations and then stop.**

5.3 **Do the above problems completely, i.e., till you find the optimum value, using the simplex tableau.**

**problem using computers. Consider a problem in standard form**

$$Ax = b, \qquad A = \begin{pmatrix} 4 & -2 & 1 & 0 & 2 \\ 7 & 1 & 3 & 1 & 1 \\ -2 & 0 & 0 & 0 & 6 \\ 5 & 4 & 3 & 2 & 1 \end{pmatrix}, \qquad b = \begin{pmatrix} 8 \\ 6 \\ 3 \\ 4 \end{pmatrix}.$$

**Find all the basic solutions and determine which of them are feasible.**