SOLVING ILPS IN MATLAB/OCTAVE

MATLAB Optimization Package

- Supports solving binary integer programming problem
- "bintprog function"
- Same interface as linprog.
 - Except that all variables are assumed binary.

- Uses branch-and-bound
 - Not considered to be a good implementation.

CVX

 Unfortunately, does not support integer programming in the free version.

- Links to commercial tools Gurobi/MOSEK/CPLEX
 - Powerful state of the art integer solvers.
 - They make it available to academic users for free.

We will continue to use GLPK for MATLAB/Octave.

Solution for MATLAB

 We will use glpkmex: a glpk interface to matlab and octave.

http://sourceforge.net/projects/glpkmex/

Octave users may already know about this interface.

It implements a convenient function glpk(..)

Over to matlab demo...