1. Convert MPS to LP type (this can be skipped of PCx subroutine is invoked without the main function)
2. Current version of PCX does not support free variables. As a result, they must be converted to the form xi+ and xi-, where a normal free variable xi = xi+ - xi-.
3. The LP data type also stores the dual in the form bT π - Σuiri where π is the lagrange multiplier vector for the equality constraint Ax = b and r represent the lagrange multipliers for the upper bounds xi <= ui
4. The compliance with complementary slackness is measured with μ.
5. x,s,r,w are >0. X and s are variable and constraints of primal. R and w are variables and constraints of the dual.
6. The first search direction uses (Δxaff, Δπaff, Δsaff, Δraff, Δwaff) the direction = AT+ si - ri - xisi.
7. The second search direction is a combined centering-corrector direction (Δxcc, Δπcc, Δscc, Δrcc, Δwcc). Obtained by setting ru = 0, rc = 0, rb = 0.
8. Actual direction is the affine scaling direction plus the centering-corrector direction
9. Calculate new iterate
10. Calculate step size
11. Check optimal
12. Repeat if not optimal