

```

===== start
% Problem 8.18
P11=nd2sys([1,-1],[1,2,1]);
P12=nd2sys([5,1],[1,2,1]);
P21=nd2sys([-1],[1,2,1]);
P22=nd2sys([1,-1],[1,2,1]);
% be careful about the I in S=1/(I+P0)!
% Although it looks like [1 0;0 1],
% it has totally different data structure!
I=sbs( abv(nd2sys(1,1),nd2sys(0,1)), abv(nd2sys(0,1),nd2sys(1,1)) );
P0=sbs( abv(P11,P21), abv(P12,P22) );
S0 = minv(madd(I,P0));
hinf_S0=hinfnorm(S0);

% then by small gain theorem, we know that
gamma_lower_bound=1/hinf_S0(2)
===== end

```