Assignability Measure Thm: Let $s_1, s_2 \in \{0,1,2\}^N$ with $s_1 \geq s_2$. Suppose P is stabilizable using switching patterns s_1 & s_2. Then the Assignability Measure for $\tilde{\Sigma}$ with s_1 is greater than or equal to that for the system with s_2, i.e.

$$d\left((\tilde{A}_S, \tilde{B}_S, \tilde{C}_S(s_1), \tilde{D}(s_1)), U_{\tilde{\Sigma}}\right) \geq d\left((\tilde{A}_S, \tilde{B}_S, \tilde{C}_S(s_2), \tilde{D}_S(s_2)), U_{\tilde{\Sigma}}\right)$$

→ Assignability Measure for our system is a monotonically non-decreasing fn of s, w.r.t the partial ordering on $\{0,1,2\}^N$

Intuition suggest the same.

→ Can not compare

$s_1 = [1, 1, 2]$

with

$s_2 = [2\ 2\ 1]$