功能实现

1.边界设置here

2.BB AAhere

3.qx here

4.compensateDelayhere

5.一些推导

$x_1 = A_0 x_0 + B_0 u_0 + g_0$

$x_2 = A_1 x_1 + B_1 u_1 + g_1$

$x_2 = A_1 A_0 x_0 + A_1 B_0 u_0 + A_1 g_0 + B_1 u_1 + g_1$

$= A_1 A_0 x_0 + A_1 B_0 u_0 + B_1 u_1 + A_1 g_0 + g_1$

$$\begin{bmatrix} A_0 \\ A_1 A_0 \\ A_2 A_1 A_0 \end{bmatrix} x_0 + \begin{bmatrix} B_0 & & \\ A_1 B_0 & B_1 & \\ A_2 A_1 B_0 & A_2 B_1 & B_2 \end{bmatrix} \begin{bmatrix} u_0 \\ u_1 \\ u_2 \end{bmatrix} + \begin{bmatrix} g_0 \\ A_1 g_0 + g_1 \\ A_2 A_1 g_0 + A_2 g_1 + g_2 \end{bmatrix}$$

$x_3 = A_2 x_2 + B_2 u_2 + g_2$

$= A_2 A_1 A_0 x_0 + A_2 A_1 B_0 u_0 + A_2 B_1 u_1 + A_2 A_1 g_0 + A_2 g_1 + B_2 u_2 + g_2$

$n = 4 \quad m = 2$

0: 0, 1

1 4.5

4行4列
4行2列

BB

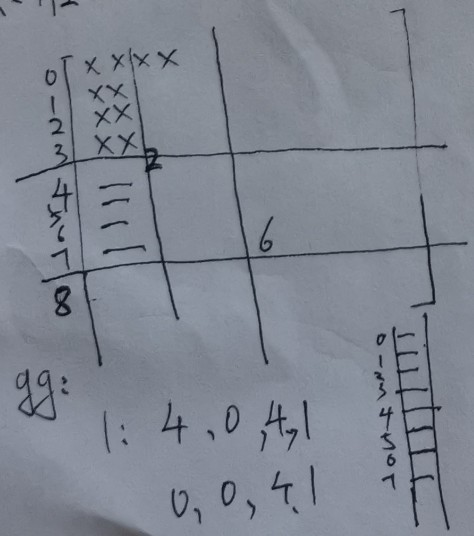
0: B_0 = 4×2

1: $A_1 B_0$ B_1

2: $A_2 A_1 B_0$ $A_2 B_1$ B_2

A_1: 4×4 * 4×2 = 4×2

A_2: 4×4 * 4×4 = 4×4



gg:

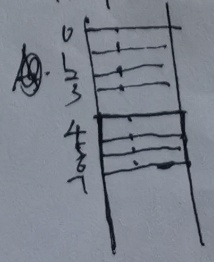
1: 4, 0, 4, 1

0, 0, 4, 1

0: 0, 0, 4.2 4, 1

2: 4, 0, 4, 4

BA: 4×4 1: 4, 0, 0 0



效果如下