

Original matrix

compute reduced row echelon form (row echelon + diagonal)

Equation	Left Hand Side	Right Hand Side
1	1	1
2	1	1
3	1	1

Check

add the zero rows

Equation	Left Hand Side	Right Hand Side	Equation	Left Hand Side	Right Hand Side
			4	0	0
1	1	1		0	0
2	1	1		0	0
	0	0	5	0	0
	0	0		0	0
	0	0		0	0
	0	0		0	0
6	0	0		0	0
7	0	0		0	0
	0	0		0	0
	0	0		0	0
8	0	0		0	0
9	0	0		0	0
	0	0		0	0
	0	0		0	0