

FIT3158 Note - W6 Unbalanced problem

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Unbalanced occurred when total supply \neq total demand. Adding dummy row / dummy column solves it.

For example,

		Destination					Supply(S _i)
		D1	D2	D3	D4	D5	
Source	01	5	1	8	7	5	15
	02	3	9	6	7	8	25
	03	4	2	7	6	5	42
	04	7	11	10	4	9	35
	Demand(d _j):	30	20	15	10	20	95

Problem: Here, total supply > total demand

		Destination					Supply(S _i)	
		D1	D2	D3	D4	D5		
Source	01	5	1	8	7	5	0	15
	02	3	9	6	7	8	0	25
	03	4	2	7	6	5	0	42
	04	7	11	10	4	9	0	35
Demand(d _j):		30	20	15	10	20	22	117 117

Solution: Adding a dummy column solves it.

Likewise, if total supply < total demand, then instead of adding a dummy column, we want to dummy row, making them equal.