

Block Diagramming Example – OMGT6213

Clem is in the process of setting up facility space for a call-in service center for customers having difficulties with their modems. The service center has six stations. The current layout in the space is as shown in Figure 1.1. The anticipated flow of customer calls that will be passed between each station is given in Table 1.1. Clem must revise the current layout so non-adjacent loads are minimized and calls, paperwork, and employees move efficiently. Nonadjacent loads cost the company \$2 whereas, adjacent loads cost the company only \$1.

Figure 1.1 – Current Layout

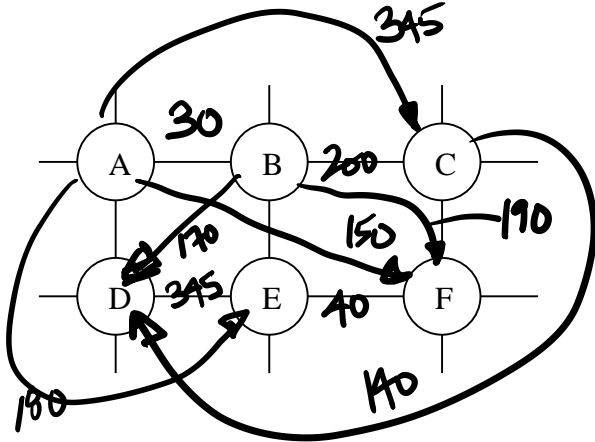


Table 1.1 – Load Summary

From \ To	A	B	C	D	E	F
Station A		30	345	--	180	150
Station B			200	170	--	190
Station C				140	--	--
Station D					345	--
Station E						40
Station F						

ADJ LOADS

A → B	30
B → C	200
D → E	345
E → F	40
<hr/>	
	615

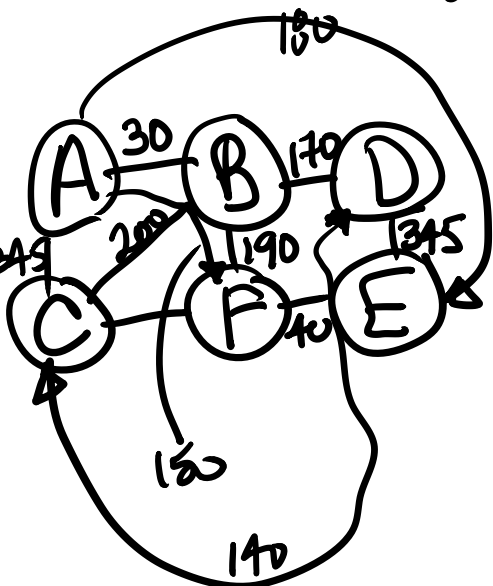
Non Adj LOADS

A → C	345
A → E	180 x2
A → F	150
B → D	170
B → F	190
C → D	140
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	1175

$$\begin{array}{r} 1175 \\ \times 2 \\ \hline 2350 \end{array}$$

Total Load

$$\begin{array}{r} 2350 \\ + 615 \\ \hline 2965 \end{array}$$



Adj Load

A → B	30
D → E	345
E → F	40
A → C	345
B → D	170
B → F	190
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	1120

Non-Adj Load

B → C	200 x2
A → E	180
A → F	150
C → D	140
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	670

$$\begin{array}{r} 670 \\ \times 2 \\ \hline 1340 \end{array}$$

Total Loads

$$\begin{array}{r} 1120 \\ + 1340 \\ \hline 2460 \end{array}$$