Block Diagramming Example – OMGT3123

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.
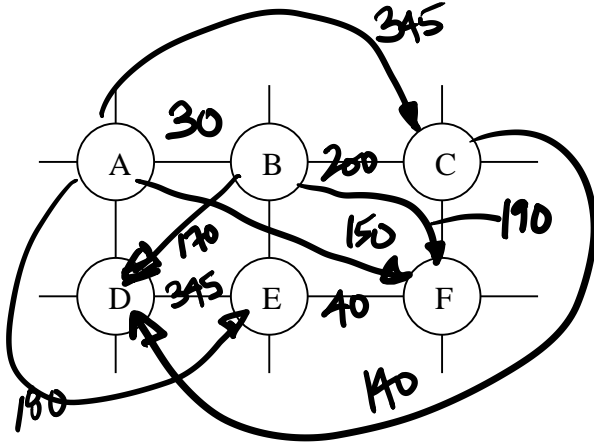
Figure 1.1 – Current Layout

Table 1.1 – Load Summary

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

ADJ LOADS

A→B 30
B→C 200
D→E 345
E→F 40
      615
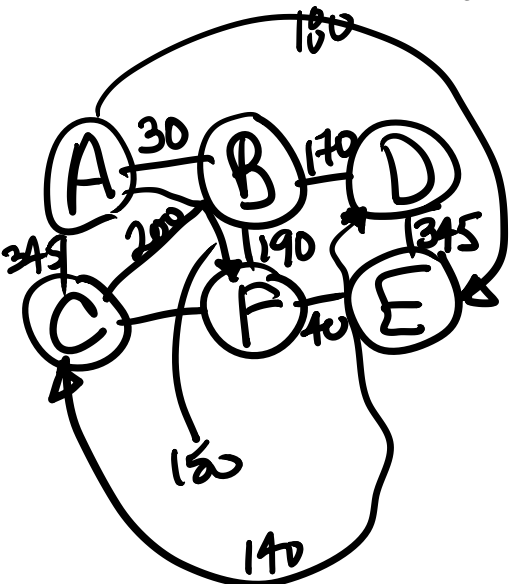
NON ADJ LOADS

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

1175
  2
2350

Total Load

2350
615
2965

ADJ LOAD

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

NON-ADJ LOAD

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

670
  2
1340

Total LOADS

1120
1340
2460