Exercise 1

Step 1: Compute hourly demand for each sector

Sectors	Capacity	Demand	Time Period			
			1	2	3	4
A	25	F1 + F2	20	30	25	25
B	20	F1	15	20	15	10
C	25	F2 + F3	15	15	15	25
D	25	F1 + F4	17	25	25	15
E	20	F3 + F4	12	7	15	15
F	15	F2	5	10	10	15

Step 2: Determine Capacity vs Demand by inputting <, > and eq

Sectors	Capacity	Demand	Time Period			
			1	2	3	4
A	25	F1 + F2	<	>	eq	eq
B	20	F1	<	eq	<	<
C	25	F2 + F3	<	<	<	eq
D	25	F1 + F4	<	eq	eq	<
E	20	F3 + F4	<	<	<	<
F	15	F2	<	<	<	eq

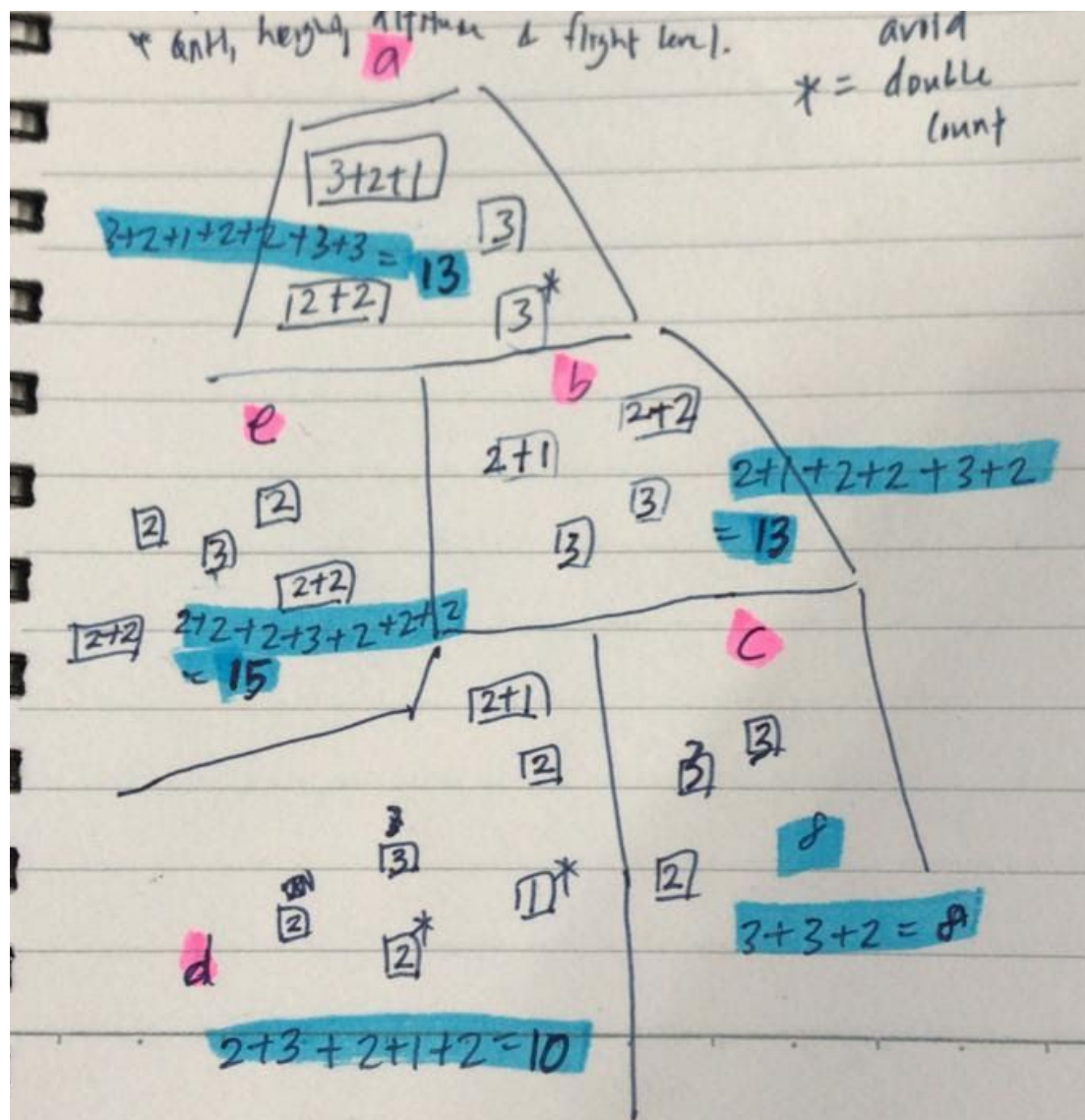Step 3: Identify Overload sector and the time period
- Sector A is Overloaded at time period 2

Step 4: Identify Underload sector and recommend merge
- Sectors E & F can be merged for time period 1 & 2
- Sectors C & E can be merged for time periods 1, 2, 3
- Sectors C & F can be merged for time periods 1, 2, 3, 4

Sectors	Capacity	Demand	Time Period			
			1	2	3	4
E + F	20	F2 + F3 + F4	17	20	25	30
C + E	25	F2 + F3 + F4	17	20	25	30
C + F	25	F2 + F3	15	15	15	25

Exercise 2

+ anH, height difference & flight level.

a

avoid

*= double count

3+2+1

2+2+1+2+2+3+3 = 13

3

2+2

3 *

e

b

2+2

2+1

2 2

3

3

2+1+2+2+3+2

3

= 13

2

2+2

2+2 2+2+2+3+2+2+2

3

c

= 15

2+1

2

3 3

3

d

2

2

1 *

2

8

2

3+3+2 = 8

2+3 + 2+1+2 = 10

WSSS — WMKK   1300 01/19

Block Time — IN: ___ OUT: ___ TOTAL: ___
Flight Time — ON: ___ OFF: ___ TOTAL: ___
Fuel Totals — START: ___ REMAIN: ___ USED: ___

Planned Route
WSSS VJB REDUK SAROX VKL WMKK

Squawk Code

Clearance

Waypoint	Route Altitude	wDir / Temp (dev)	wSpd	TAS	Track / WCA	TH / Var	MH	GS	Dist	ETE / ETO	ATE / ATO	Fuel EFR	Fuel AFR
WSSS N 01°21.55' E 103°59.36'	-Ð+	22° / 26°C (+11°)	12	93	313° / +7°	320° / -0°	319°	88	12.9	8.1 / 8.1		0.0 / 0.0	
TOC N 01°30.35' E 102°49.88'	/ 7000	80° / 15°C (+14°)	8	140	313° / +3°	315° / -0°	315°	145	13.9	5.8 / 14		0.0 / 0.0	
VJB 112.5 N 01°39.84' E 103°39.65'	-Ð+ 7000	81° / 15°C (+14°)	8	140	319° / +3°	322° / -0°	322°	144	52.9	22 / 36		0.0 / 0.0	
REDUK N 02°19.95' E 103°04.98'	-Ð+ 7000	75° / 15°C (+14°)	8	140	319° / +3°	321° / -0°	321°	143	37.3	16 / 52		0.0 / 0.0	
SAROX N 02°48.04' E 102°40.31'	-Ð+ 7000	58° / 14°C (+13°)	10	140	265° / +2°	267° / -0°	267°	149	42.3	17 / 1h09		0.0 / 0.0	
TOD N 02°44.61' E 101°58.19'	-Ð+ 7000	57° / 15°C (+13°)	12	144	265° / +2°	268° / -0°	268°	155	14.0	5.6 / 1h14		0.0 / 0.0	
VKL 116.1 N 02°43.47' E 101°44.28'	-Ð+	50° / 16°C (+13°)	14	132	295° / +2°	297° / +0°	298°	135	2.7	1.2 / 1h15		0.0 / 0.0	
WMKK N 02°44.60' E 101°41.88'													