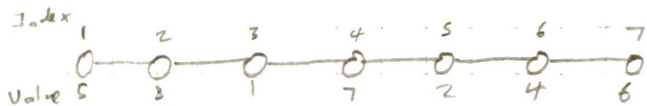


Algorithms Illuminated Ch. 16

Andrew DoSS

16.1



Forward processing...

Array

0 5 5 6 12 12 16 18

backwards reconstruction...

{7, 4, 13}

16.2.

a) False

Counter example



b) False

Counter example



c) False

Counter example



When $i=2$, A is not in the MWIS. When $i=3$, A is in the MWIS.

d) True.

16.3 c).

16.4

Capacity

	Num Items					
	0	1	2	3	4	5
0	0	0	0	0	0	0
1	0	1	1	1	1	1
2	0	1	1	3	3	3
3	0	1	2	4	4	4
4	0	1	3	4	4	5
5	0	1	4	5	5	6
6	0	1	3	6	6	8
7	0	1	3	6	7	9
8	0	1	3	6	8	9
9	0	1	3	6	8	10

Final items
 $\{5, 3, 2\}$