CS4335 Tutorial 6 (dynamic programming

Q1: Given 8 jobs with the following (v, s, f)-values (v=value, s= start time, and f= finish times):

a=(3.5,0,6), b=(2,1,4), c=(3,3,5), d=(3,3,8), e=(6.5,4,7), f=(2.5,5,9), g=(12,6,10), h=(8,8,11).

Find a set of mutually compatible jobs with the maximal total value.

Sort by start time:

a(0, 6), b(1,4), c(3,5), d(3,8),e(4,7), f(5,9), g(6, 10), h(8, 11)

Sort by finish time:

b(1, 4), c(3,5), a(0,, 6), e(4,7), d(3,8), f(5,9), g(6, 10), h(8, 11)

p(h)=d, p(g)=a, p(f)=c, p(e)=b, p(d)=0, p(c)=0, p(b)=0, p(a)=0

		b	c	a	e	d	f	g	h
i	0	1	2	3	4	5	6	7	8
M	0	2	3	3.5	8.5	8.5	8.5	15.5	16.5
B	0	1	1	1	1	0	0	1	1

Backtracking:

h(8), e(6.5), b(2)