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IP - SEQUENCING PROBLEM EXAMPLES

Try 2 Upper Bounds

- SEQUENCE ALL JOBS BY EDD (WORKS WELL IF SETUP TIME IS SMALL COMPARED TO PROCESS TIME)

	31	11	21	12	22	32
	2+4	2+3	2+4	2+2	2+3	2+2
C_{ij}	6	11	17	21	26	30
d_{ij}	4	5	6	9	9	10
L_{ij}	2	6	11	14	17	20

$\therefore L_{\max} = 20$

- SEQUENCE ALL FAMILIES CHOOSING

FAMILY WITH THE EARLIEST DUE DATE FIRST (WORKS WELL WHEN SETUP TIME IS COMPARATIVELY LARGE)

	31	32	11	12	21	22
	2+4	2	2+3	2	2+4	3
C_{ij}	6	8	13	15	21	24
d_{ij}	4	10	5	7	6	9
L_{ij}	2	2	8	8	15	15

$\therefore L_{\max} = 15$

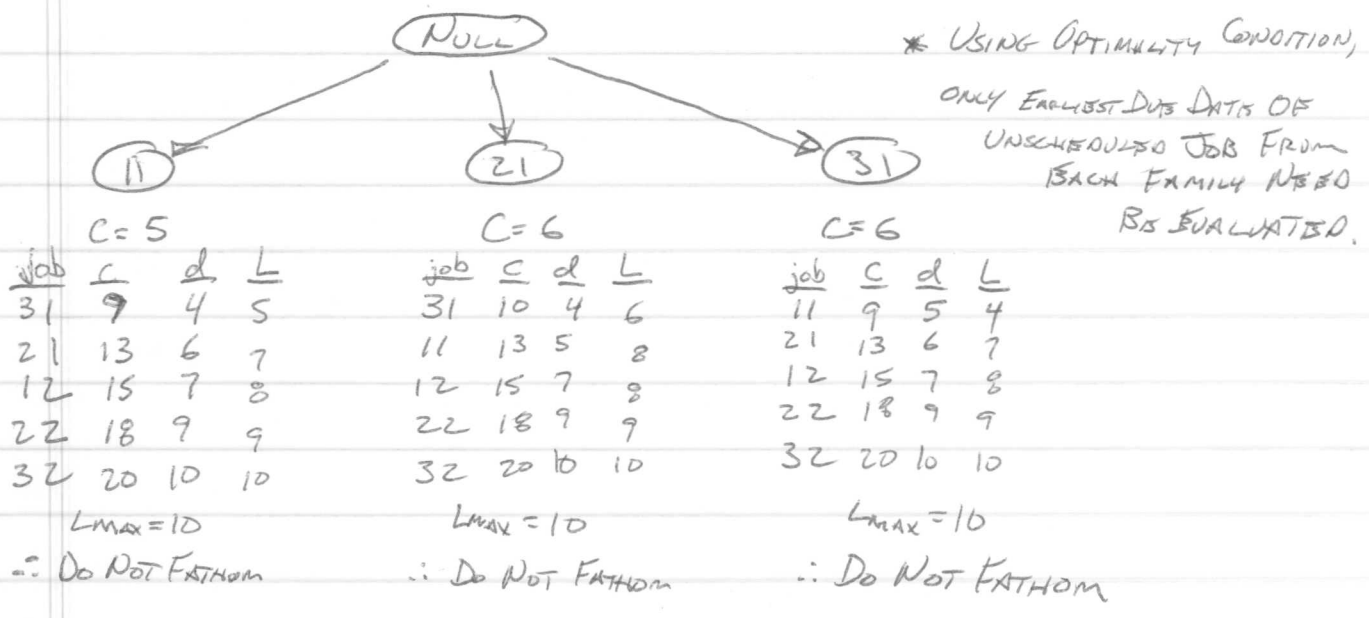
UPPER BOUND = 15

STOPPED HERE
9/27/05

IP-SEQUENCING PROBLEM

EXAMPLES

LOWER BOUND - RELAX SETUP TIME CONSTRAINT. FOR FREE JOBS.
EDD SOLVES RELAXED PROBLEM TO OPTIMALITY.



CAN LOWER BOUND BE IMPROVED?

YES, IF JOB IS NOT FROM SAME FAMILY AS LAST JOB IN
FIXED SET, THEN ADD ^{AT LEAST ONE} THIS FAMILY SETUP TIME TO L.

e.g. FIRST CALCULATIONS COULD BE

job	L
31	5+2
21	7+2
12	8
22	9+2
31	10+2

$\therefore L_{max}=12$

IP- SEQUENCING PROBLEM

EXAMPLES

