A	3	G	5
B	4	H	2
C	7	I	1
D	4	J	6
E	2	K	3
F	1		

21 + 17

$\sum p_i$ 38

① Midterm Fall 2017

Q. Work?

Sol^n Sum of all Processing Times.

Q. Width?

Sol^n Max number of tasks without Direct dependency

Multiple sets of Tasks Ex. 1- A, B, C
2. D, E
3. F, G, H
4. F, G, I

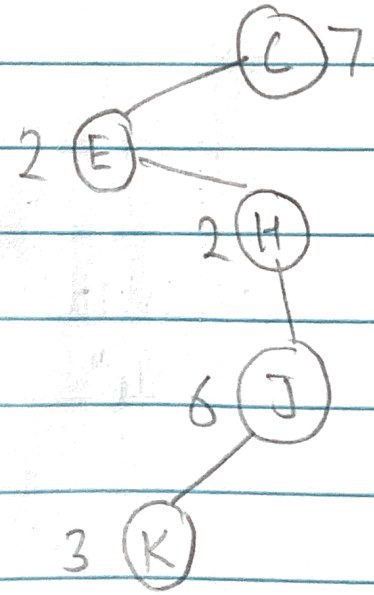
Max Width = 3

Q. Critical Chain and it's length.

Sol^n Longest chain of task with processing time is.

C → E → H → J → K

CP = 20



(2). Strassen

Q. Work?

Soln

A	0	B	
A_{11}	0	B_{11}	0
A_{12}	0	B_{12}	0
A_{21}	0	B_{21}	0
A_{22}	0	B_{22}	0
m_1	1	N_1	1
m_2	1	N_2	1
m_3	1	N_3	1
m_4	1	N_4	1
m_5	1	N_5	1
m_6	1	N_6	1
m_7	1	N_7	1
P_1	5	T_1	1
P_2	5	T_2	1
P_3	5	T_3	1
P_4	5	C_{11}	1
P_5	5	C_{12}	1
P_6	5	C_{21}	1
P_7	5	C_{22}	1
		C	0
		42 +	14

$\Sigma p_i = 56$

Q. Width?

Soln

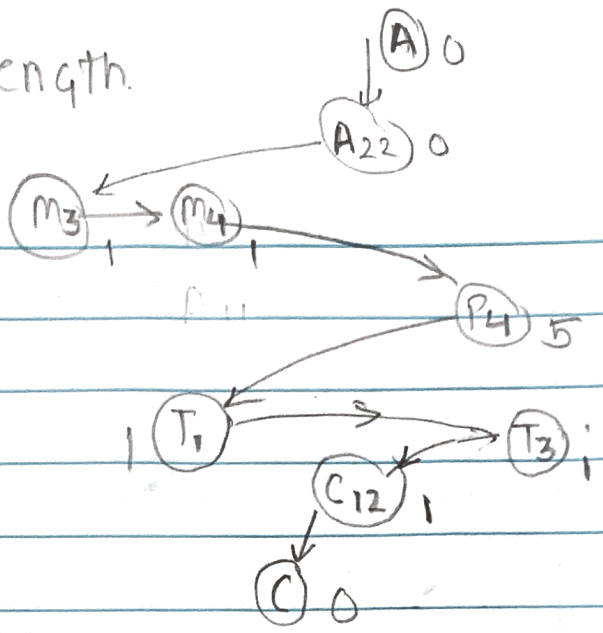
few of M and N family of tasks can be Executed without and dependencies on each other Therefore.

$m_1, m_2, m_3, m_5, m_7, N_1, N_2, N_3, N_5, N_6$

Width = 10

Q Critical chain, its length

Soln.



CP = 10

3 Independent Task 1

Q Work?

Soln

A - 1 D - 1 G - 3
B - 1 E - 1
C - 1 F 1

3 + 3 + 3

$\sum p_i = 9$

Q width?

Soln Width = 1

Q. Critical chain and it's length

Soln

(G) CP = 3

4 Independent Task 2

Q work?

Soln

A - 3 C - 4 E - 5 G - 6
B 4 D - 5 F 6

$\sum p_i = 33$

Width? Soln : width = 1

Critical Chain? Either (F) or (G) with CP = 6