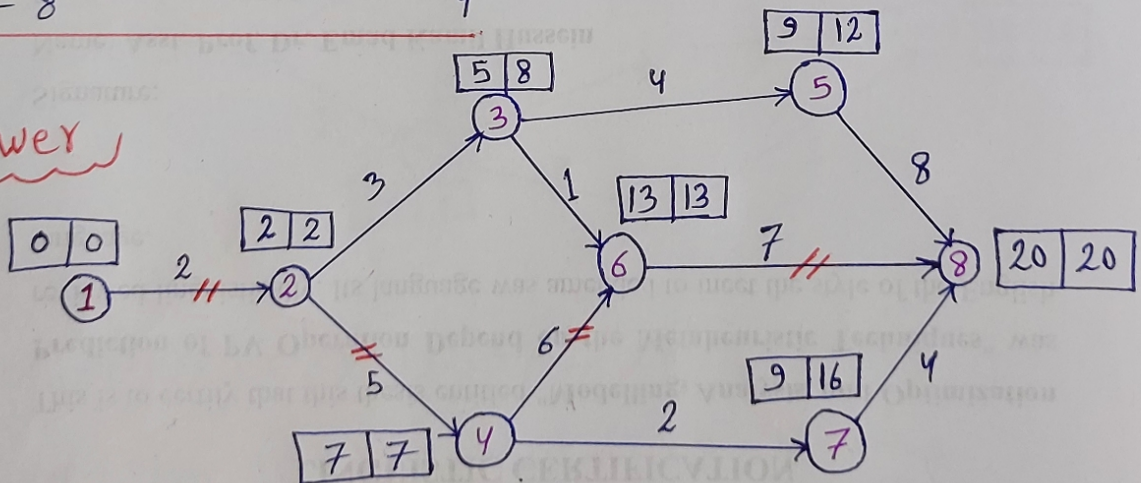


مجموعة أمثلة محلولة

Ex 1 From The following Table find The critical path (C.P) and The critical Time (C.T)?

Activity	Duration (D) [weeks]
1-2	2
2-3	3
2-4	5
3-5	4
3-6	1
4-6	6
4-7	2
5-8	8
6-8	7
7-8	4

Answer



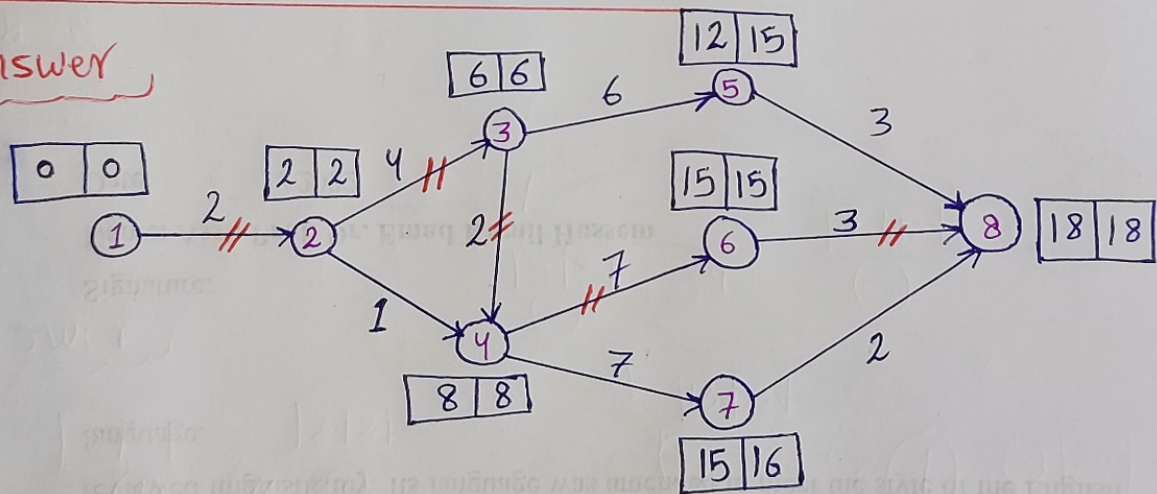
critical path (C.P) = 1, 2, 4, 6, 8

critical Time (C.T) = 2 + 5 + 6 + 7 = 20 weeks

Ex 2 From the below data for a small project, draw the network and determine the critical path (C.P) and the critical time (C.T) ?

<u>Activity</u>	<u>Duration(D) [days]</u>
1-2	2
2-3	4
2-4	1
3-4	2
3-5	6
4-6	7
4-7	7
5-8	3
6-8	3
7-8	2

Answer



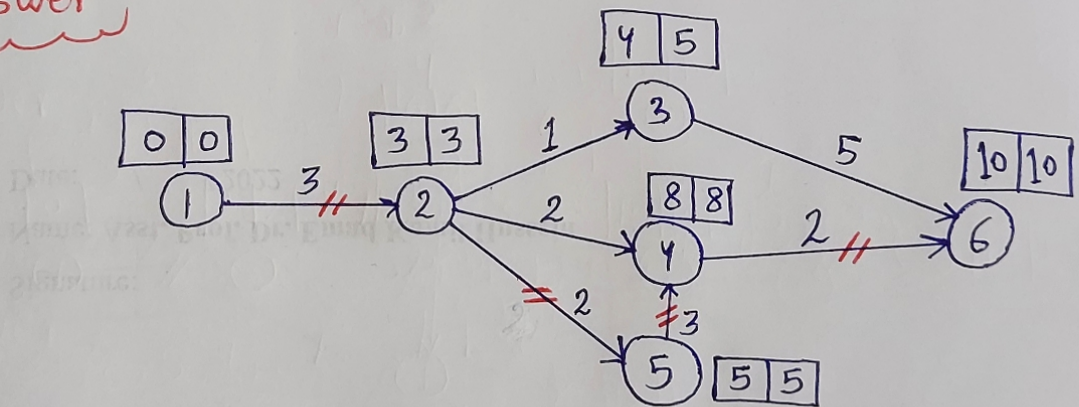
critical path (C.P) = 1, 2, 3, 4, 6, 8

critical time (C.T) = 2 + 4 + 2 + 7 + 3 = 18 days

Ex3 The data for a small project are given, draw the network and determine the critical path (c.p) and the critical time (c.T)?

<u>Activity</u>	<u>Duration (D) [days]</u>
1-2	3
2-3	1
2-4	2
2-5	2
3-6	5
5-4	3
4-6	2

Answer



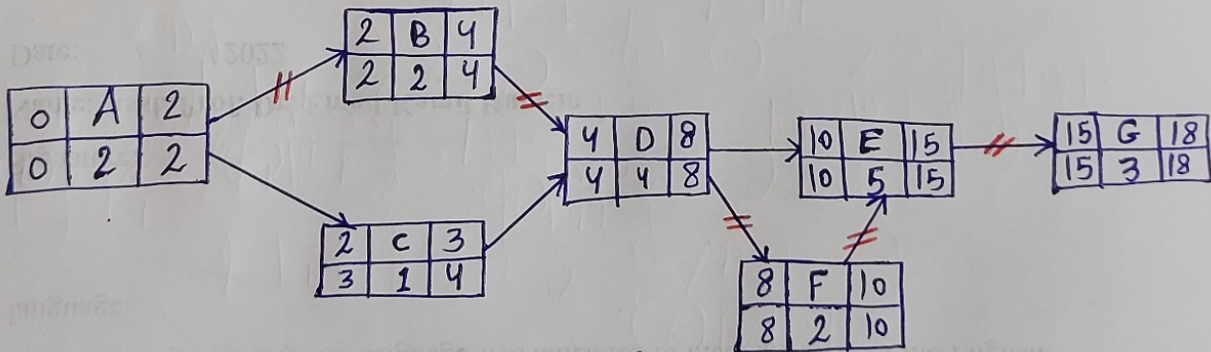
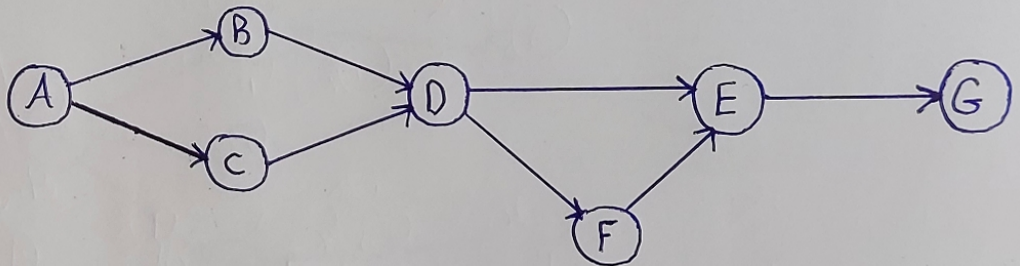
critical path (c.p) = 1, 2, 5, 4, 6

critical time (c.T) = 3 + 2 + 3 + 2 = 10 days

Ex 4 The data for a project are given, draw the network and determine the critical path (C.P) and the critical time (C.T).

Activity	Predecessor	Duration (D) [days]
A	-	2
B	A	2
C	A	1
D	C, B	4
F	D	2
E	D, F	5
G	E	3

Answer



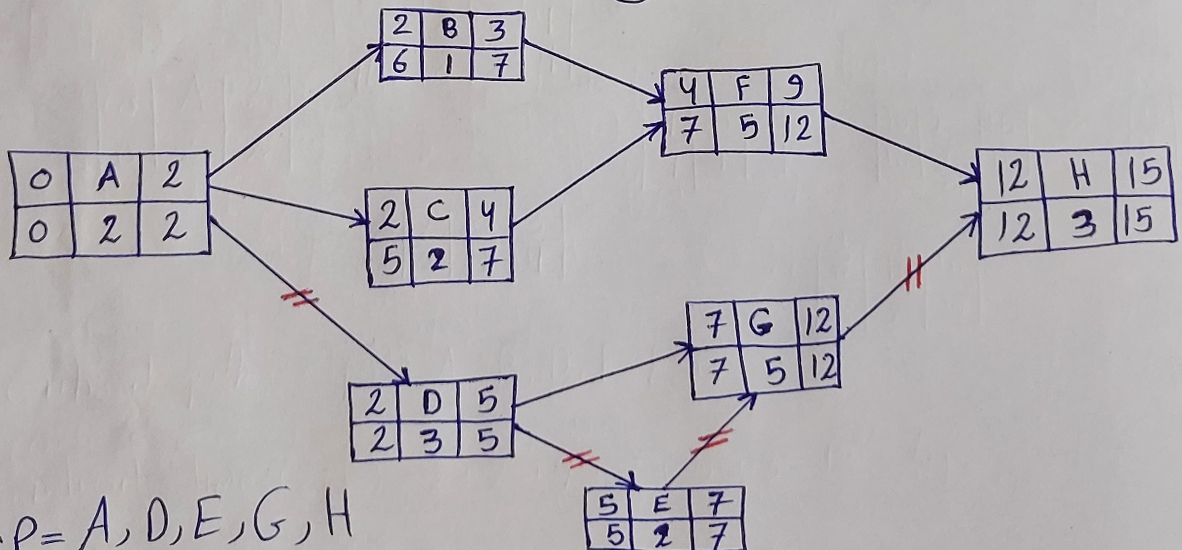
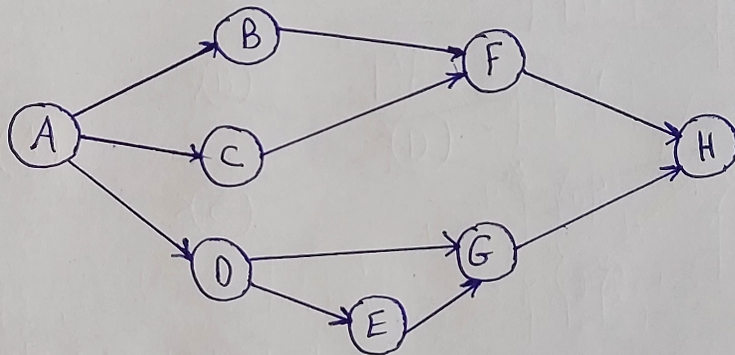
Critical path (C.P) = A, B, D, F, E, G

Critical time (C.T) = $2 + 2 + 4 + 2 + 5 + 3 = 18$ days

Ex 5 From the below data, draw the network and find the critical path (c.p) and the critical time (c.T)?

Activity	Predecessor	Duration (D) [days]
A	-	2
B	A	1
C	A	2
D	A	3
E	D	2
F	B, C	5
G	D, E	5
H	F, G	3

Answer



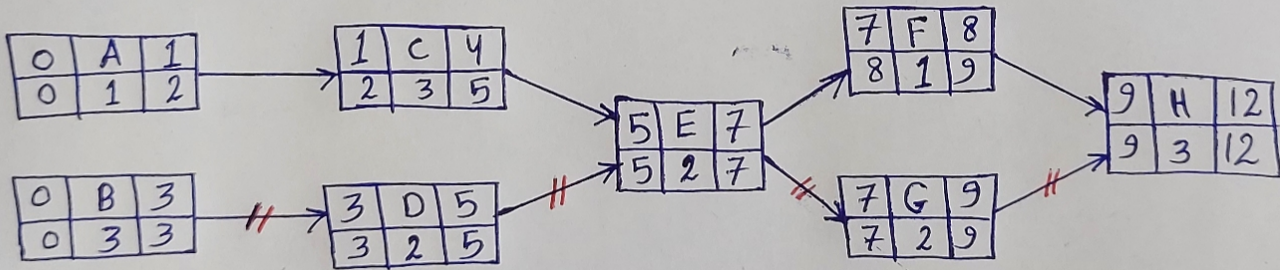
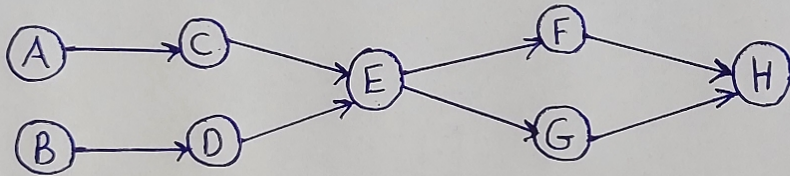
c.p = A, D, E, G, H

c.T = 2 + 3 + 2 + 5 + 3 = 15 days

Ex 6 From the below tables, draw the network and find the critical path (C.P) and the critical time (C.T)?

Activity	Predecessor	Duration (D) [days]
A	-	1
B	-	3
C	A	3
D	B	2
E	C, D	2
F	E	1
G	E	2
H	G, F	3

Answer



critical path = B, D, E, G, H

critical Time = $3 + 2 + 2 + 2 + 3 = 12$ days