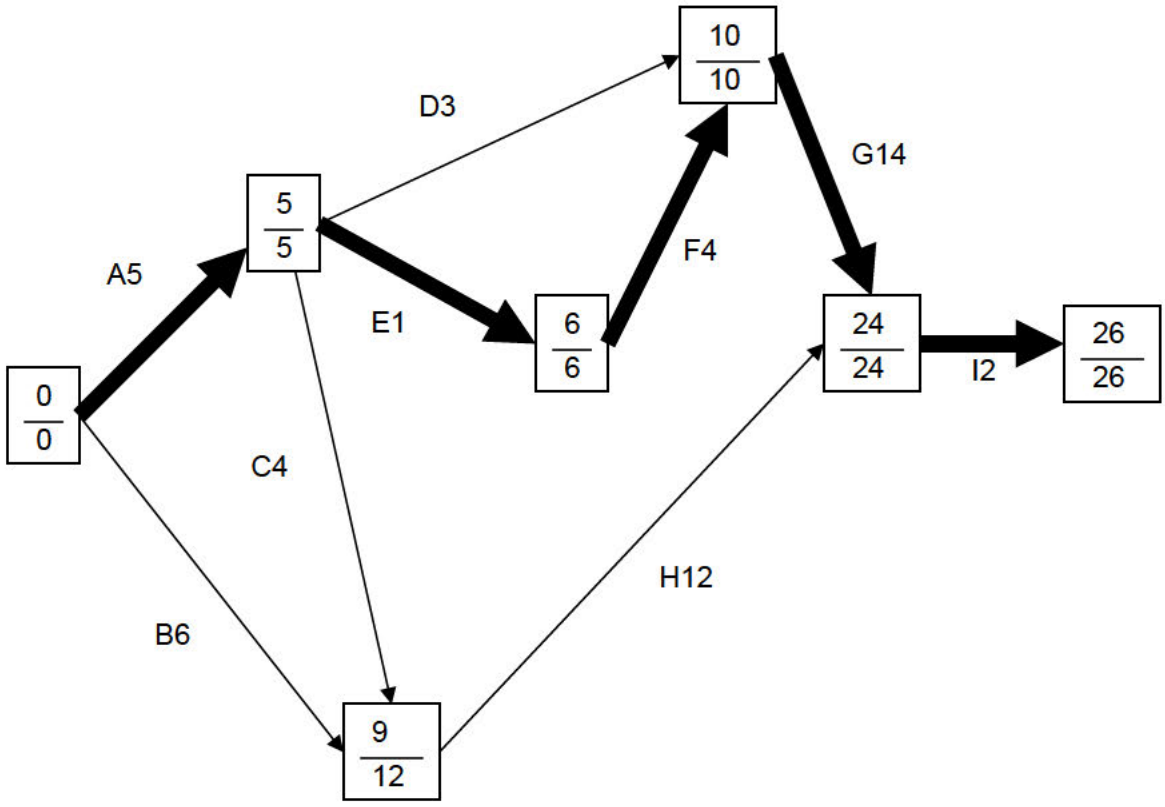
Student 1: Low Excellence

Precedence Table

	Activity	Time (weeks)	Preceded by
A	Prepare the drawings	5	
B	Identify tenants	6	
C	Develop Prospectus	4	A
D	Select construction company	3	A
E	Prepare resource consents	1	A
F	Obtain resource consents	4	E
G	Build mall	14	D,F
H	Finalise contracts with tenants	12	B,C
I	Tenants move in	2	G,H

Network Diagram



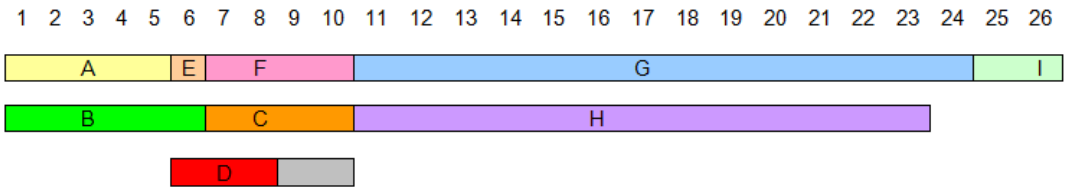
1

The critical path is: A, E, F, G, I

2

Minimum length of time required to complete project: 26 weeks

Minimum number of supervisors: 3



3

Recommended weeks for manager's visit: if he is to see three jobs in process he would have to visit from weeks 6 to 10 depending on the scheduling of D.

Task D would have to be delayed 3 or more weeks for the critical path to change. Otherwise the critical path will stay the same with (A, E, F, G, I). If task D was delayed by 3 or more weeks the new critical path would be (A, D, G, I).

The impact of any other delays significant enough to extend the projects minimum completion time:
There are 4 tasks that are not used in the critical path. These tasks could become part of the new critical path. Task (H) has a float of 3 weeks. Therefore if Task (H) was delayed by three weeks or more it would create a new critical path of (A, C, H, I). Also task (C) can only be part of the critical path if Task (H) is delayed. Task (C) has a float of 0. For task (B) to be part of the critical path it would need to be delayed by 3 or more weeks but only if Task (C) is delayed. This would make the critical path (B, H, I). The easiest way for the critical path to be effected is if Task (D) was delayed 3 or more weeks because it has a float of two weeks and does not rely on any other tasks to be delayed all possible paths would effect the recent critical path and extend the minimum completion time.

5

	Free float	Total Float
A	0	0
B	3	6
C	0	3
D	2	2
E	0	0
F	0	0
G	0	0
H	3	3
I	0	0

4