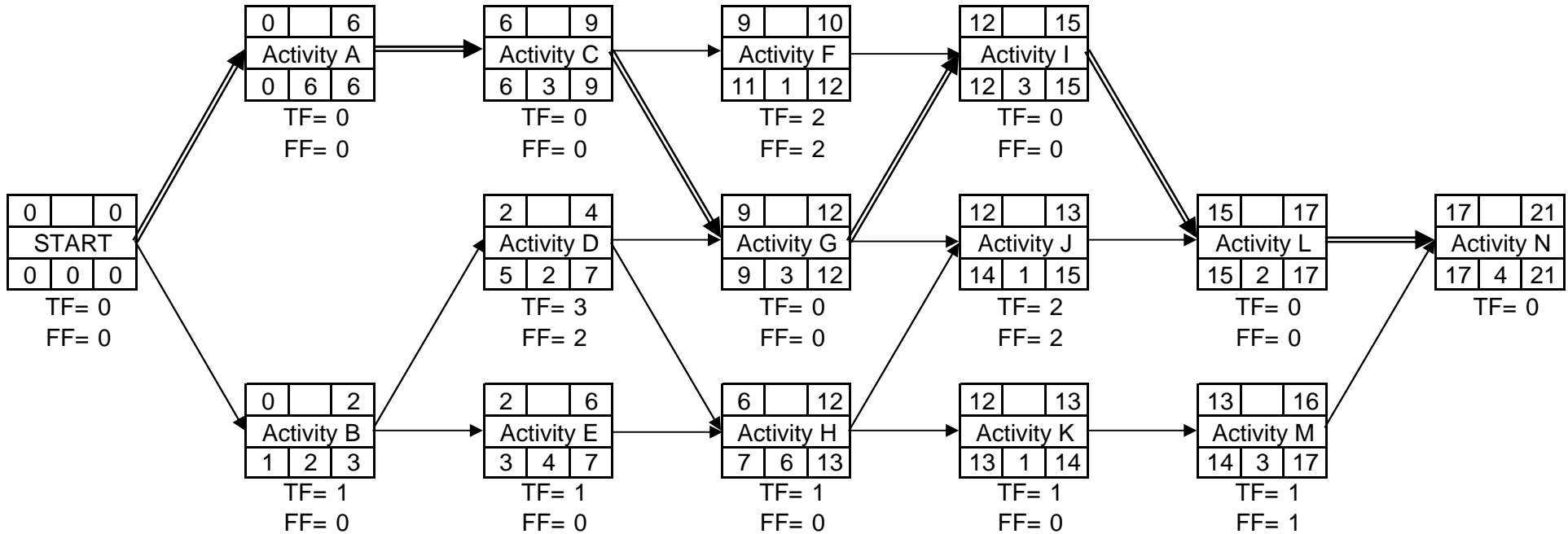
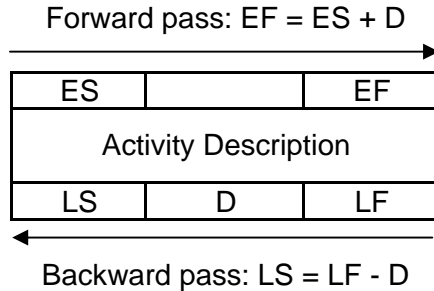


Precedence Diagram (AON - Activity On Node)



Legend:



ES: earliest start
 EF: earliest finish
 LS: latest start
 LF: latest finish
 D: duration
 TF: Total Float (or Total Slack)
 FF: Free Float (or Free Slack)

Critical path 1: Start A C G I L N

Answers to assignment 1:

- 1 EF of G = 12
- 2 ES of H = 6
- 3 project duration = 21
- 4 LF of J = 15
- 5 LS of D = 5
- 6 TF of J = 2
- 7 TF of F = 2
- 8 FF of E = 0
- 9 FF of D = 2
- 10 # of critical paths = 1

$$ES_A=0; EF_A=ES_A+D_A$$

$$ES_B=EF_A; EF_B=ES_B+D_B; \text{ repeat in case a node has one predecessor}$$

$$ES_G=\max(EF_C, EF_D); \text{ repeat in case a node has 2 or more predecessor}$$

$$TF = LF - EF = LS - ES$$

$$FF_{\text{current}} = ES_{\text{follower}} - EF_{\text{current}}$$

$$\text{e.g. } FF_J = ES_L - EF_J, FF_C = \min(ES_F, ES_G) - EF_C$$