

Figure 5-8 A complete network from Table 5-2.

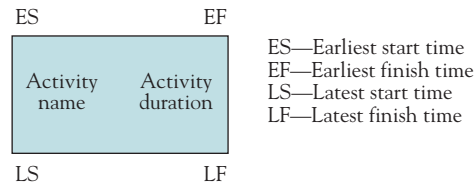


Figure 5-9 Information contents in an AON node.

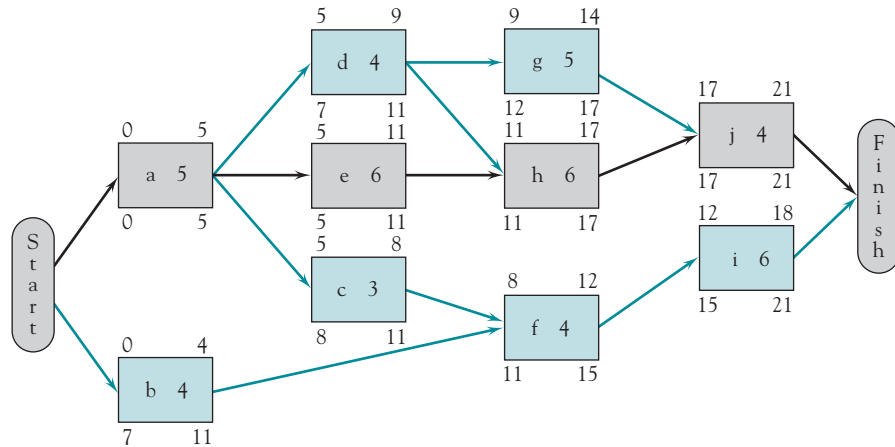


Figure 5-10 The critical path and time for sample project in Table 5-2.

completed on Day 5. Adding their respective durations to their ESs gives us their EFs, **c** finishing on Day 8, **d** on Day 9, and **e** on Day 11. Task **f** cannot start before *both* **b** and **c** are finished on Day 8, resulting in the EF for **f** on Day 12. Similarly, we find EFs for tasks **g** ($9 + 5 = 14$) and **h** ($11 + 6 = 17$). Recall that a successor cannot be started until all predecessors are completed. Thus, **h** cannot start until Day 11 when both **d** and **e** are finished—Days 9 and 11, respectively. The same situation is true for task **j**. It cannot be started until both **g** and **h** are completed on Day 17, giving an EF of $17 + 4 = 21$. Task **i**, following **f**, has an EF of $12 + 6 = 18$. No tasks follow **i** and **j**, completed on Days 18 and 21, respectively. When they are both finished, the project is finished. That event occurs on Day 21.

All activities, and thus all paths, must be completed to finish the project. The shortest time for completion of the network is equal to the longest path through the network, in this case **a-e-h-j**. If any activity on the **a-e-h-j** path is even slightly delayed, the project will be