







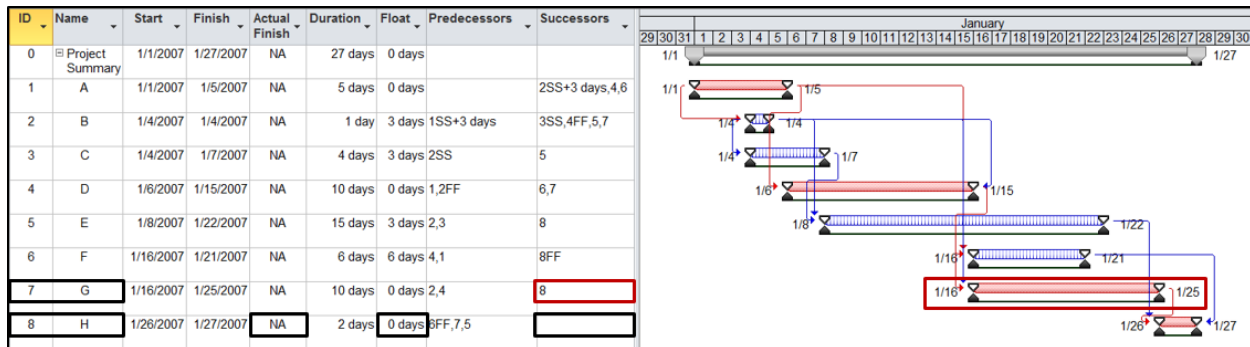




Of the two tasks, Task G has a later finish date (1/25/2007) than Task F (1/21/2007) and also less float (0 days vs. 6 days). It is on the critical path, which is also indicated by its representation by a red bar on the Gantt chart.

*The tasks on the critical path thus far are: A – D – G*

Since it is on the critical path, repeat step 3 for Task G. Evaluate its successor tasks to determine which is on the critical path. Task G only has one successor, ID 8 (Task H). Task H is not a summary task because it has a predecessor, and it is not complete.



Task H has 0 days of float. Notice it is also the last task in the network, and has no successor tasks. Therefore, Task H is the last task on the critical path.

*The critical path is: A – D – G – H.*

Step 4 is complete and the critical path has been determined.

### Critical Path Duration

The critical path determined in steps 1–4 is the path with the longest total duration through the project. The Project Summary task shows a total project duration of 27 days. Adding the durations of the tasks on the critical path results in a total duration of 27 days.

$$\begin{aligned}
 \text{Critical Path Duration} &= \text{Task A} + \text{Task D} + \text{Task G} + \text{Task H} \\
 &= 5 \text{ days} + 10 \text{ days} + 10 \text{ days} + 2 \text{ days} \\
 &= 27 \text{ days}
 \end{aligned}$$

So, A – D – G – H is the path with the longest duration through the project. In addition, all the tasks on this path have 0 days of float, while the remaining tasks not on this path have more than 0 days of float.