

Lab: Perform Critical Path Analysis

Estimated duration: 15 minutes

Objectives

- Perform a forward pass
- Perform a backward pass
- Identify the critical path

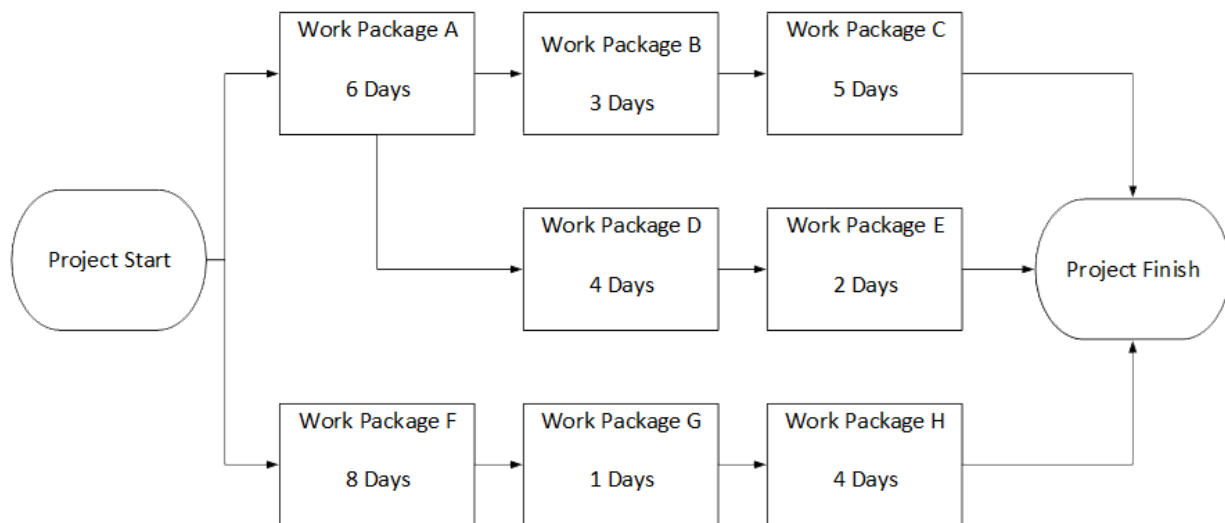
Prerequisites

You must have Microsoft Office or Microsoft 365 apps installed on your computer or have access to the free web version of Microsoft 365.

Exercise

Perform critical path analysis based on the network diagram provided.

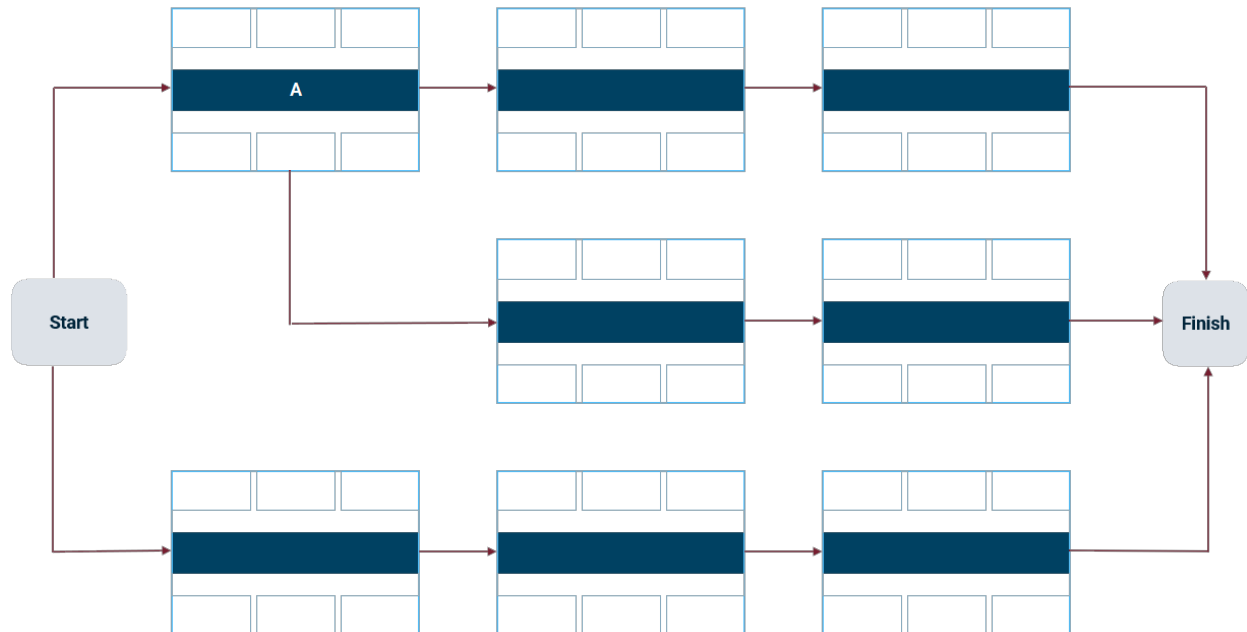
Step 1: Review the network diagram below.



Step 2: Next, keeping the CTRL key pressed, click [here](#) to download the **Critical Path Analysis** template.

Note: Use the COMMAND key instead of CTRL on Mac systems.

Step 3: Open the document. The document contains the skeletal structure for the network diagram. The structure has several blocks.



Notice the legend for blocks within each work package.

Early Start (ES)	Duration	Early Finish (EF)
Work Package Name		
Late Start (LS)	Slack/ Float	Late Finish (LF)

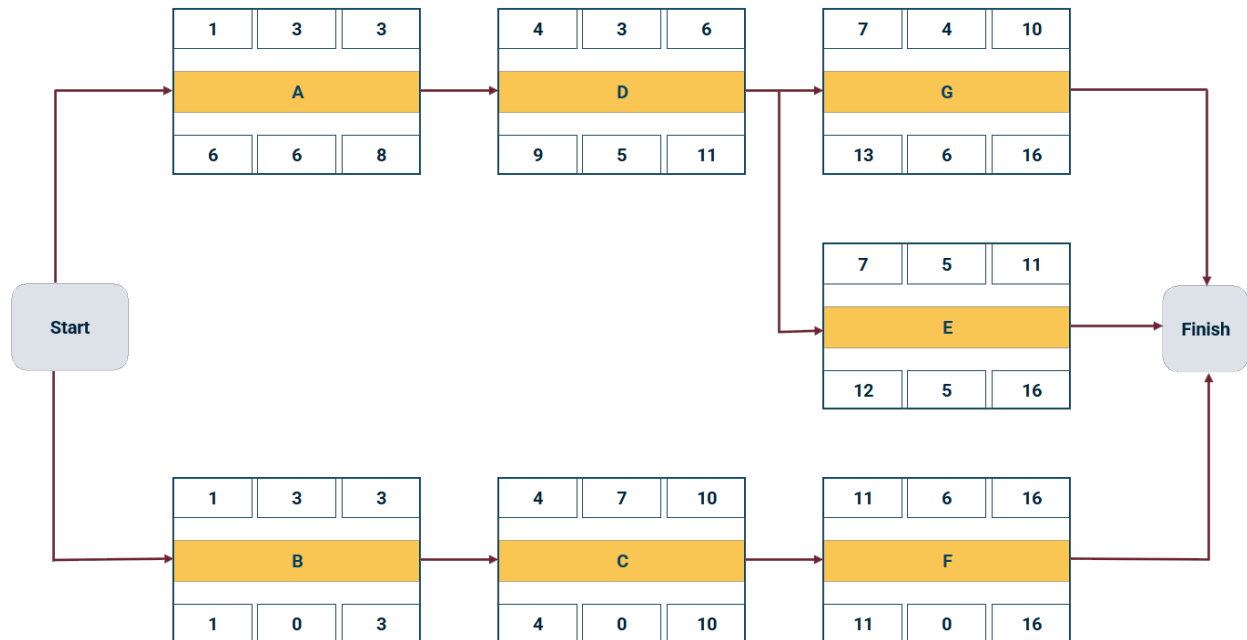
Step 4: Add the work package names.

Step 5: Perform a forward pass to help you determine the Early Start (ES) and Early Finish (EF) for all activities and calculate critical path.

Tip: Start with package A. Enter ES as 1, duration as 6 and EF as 6. Then, proceed with B, C and so on.

Step 6: Perform a backward pass to help you determine the Late Start (ES), Slack or Float, and Late Finish (LF) for all activities.

Note: Refer to the completed Critical Path analysis example below.



Step 7: Save the document. You can use the critical path analysis details when planning for the project.

Make sure to attempt the exercise, as it will help you gain a clear understanding of the concepts covered in the module.

Potential Solution

After completing the exercise, you can refer to the **Potential Solution** document to compare the critical path analysis that you performed. Keeping the CTRL key pressed, click [here](#) to view or download the **Potential Solution** document.

Note 1: The document will open in a new tab.

Note 2: Use the COMMAND key instead of CTRL on Mac systems.