

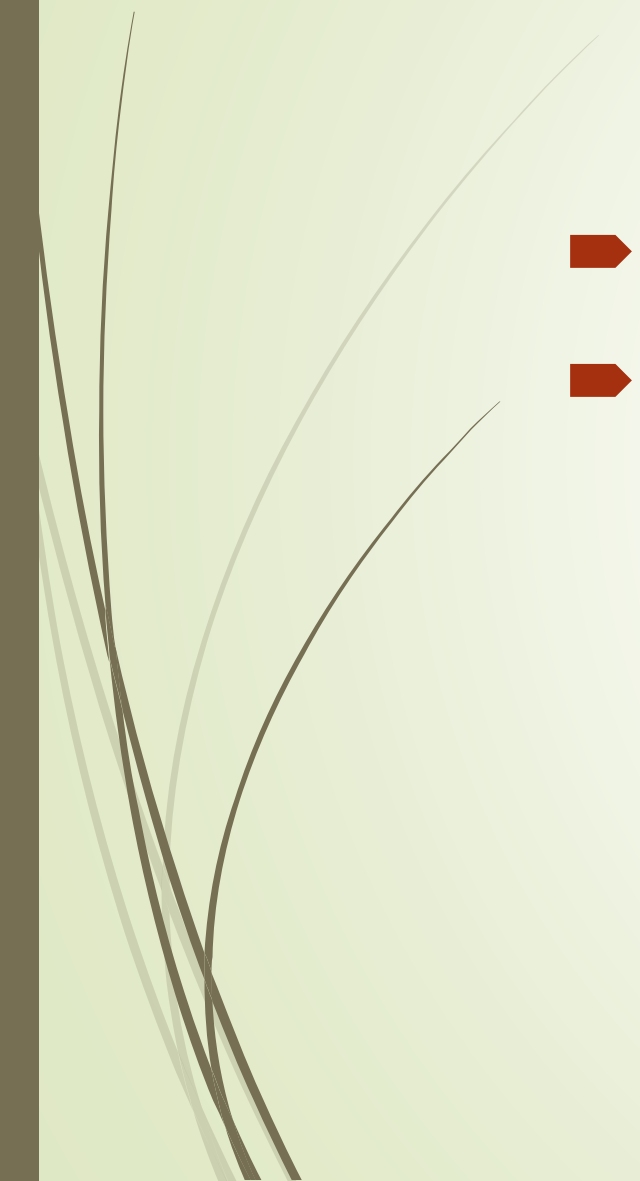



ISYS90050 IT Project and Change Management

Tutorial 5



Activity 1 Task 1: Identify travel origin

- Pick a Melbourne location
 - Describe how you might travel to University of Melbourne from this location?
- 



Activity 1 Task 2: Travel from source to destination

➡ How might you travel?



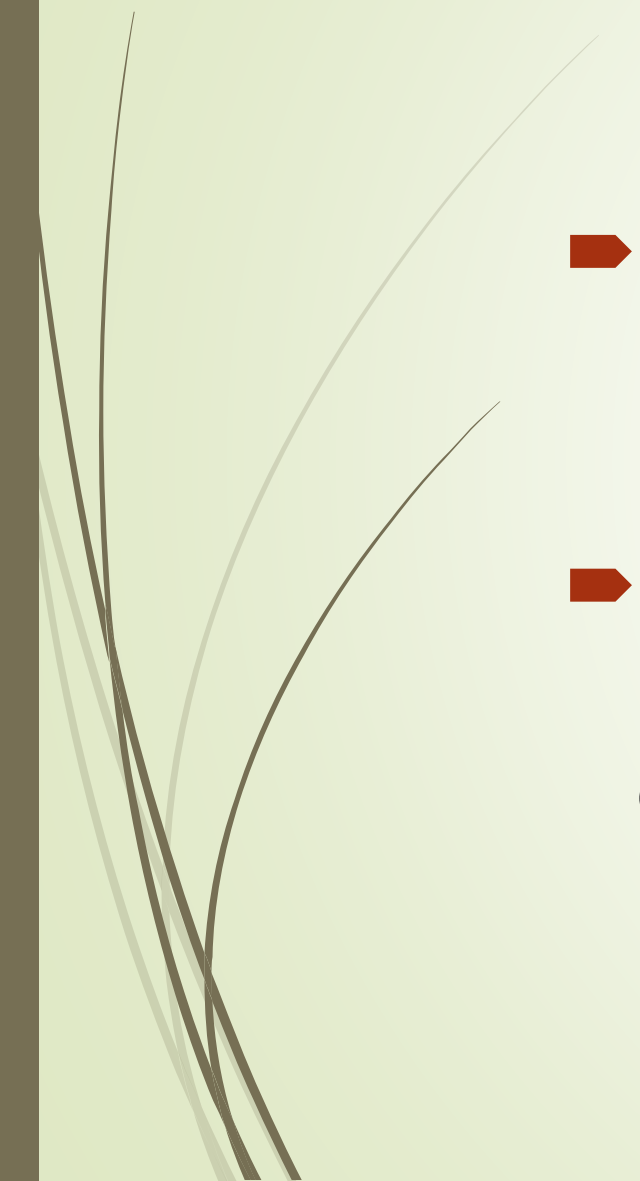


Activity 1 Task 3: Individual estimate of travel time

- Estimated time and assumptions




Activity 1 Task 4: Scenarios

- Scenario 1 – You are travelling to the University to attend a tutorial (or) a lecture.
 - Scenario 2 – You are travelling to the University to attend one of your final exams in the semester.
- 



Activity 1 Task 5: Compare and discuss

- Any difference? Why?
- What additional situations considered?
- Factors not in your control?



Activity 1 Task 6: Test of estimate

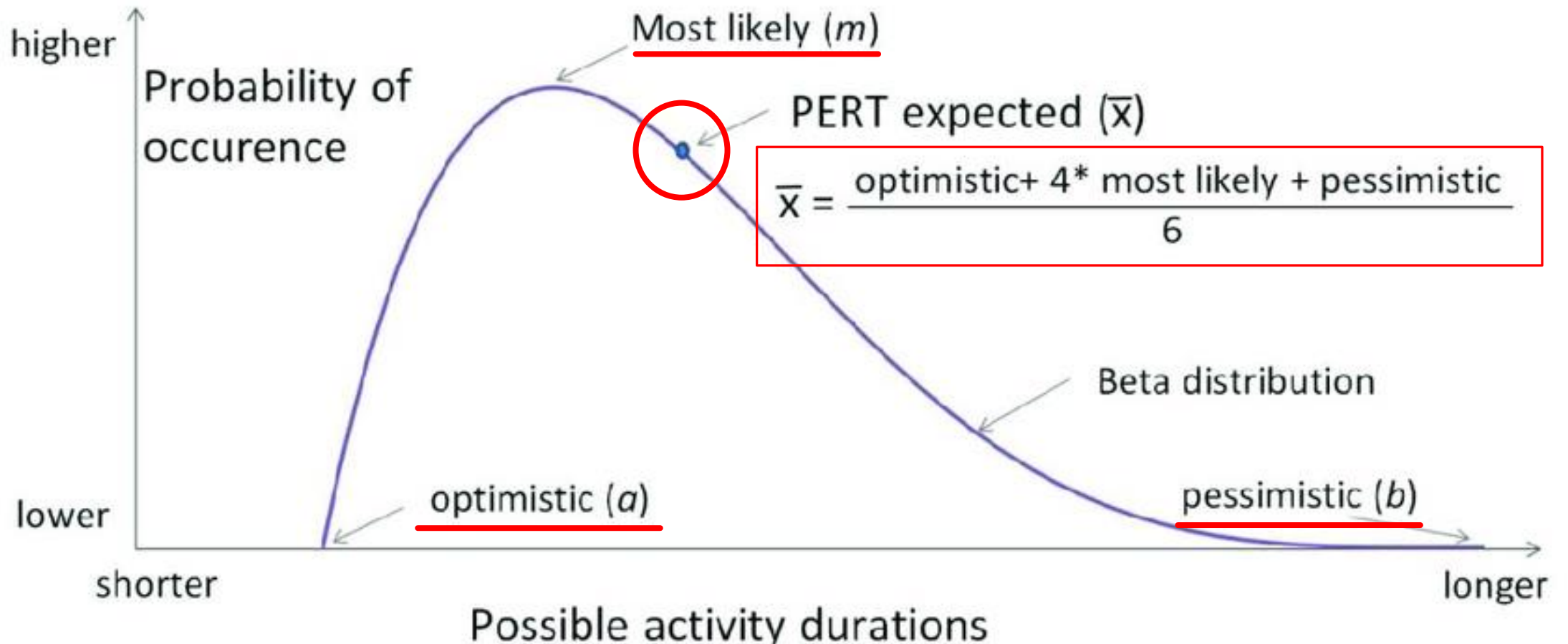
- How to test? How valid is your test?
 - Can the estimate be improved?
- 

Activity 2 Task 1: Expected Duration of Tasks

Task ID	Optimisitic Time (a)	Pessimisitic Time (b)	Most likely Time (m)
A	3	6	4
B	1	3	2
C	4	7	6
D	2	5	3
E	3	9	6
F	3	8	4

$$\text{Expected time} = (a + 4m + b) / 6$$

Expected time = $(a + 4m + b) / 6$



Activity 2 Task 2: PERT

Task ID	Description	Duration	Dependent on:
A	Prototype user interface	10 days	-
B	Design file structures	2 days	A
C	Define interfaces	3 days	B
D	Define/test compression algorithm	5 days	B
E	Define coding standards	5 days	-
F	Devise test plan	5 days	B
G	Prepare test cases and data	5 days	F
H	Review phase deliverables	2 days	C, E, G, D

START

PERT Reference Block

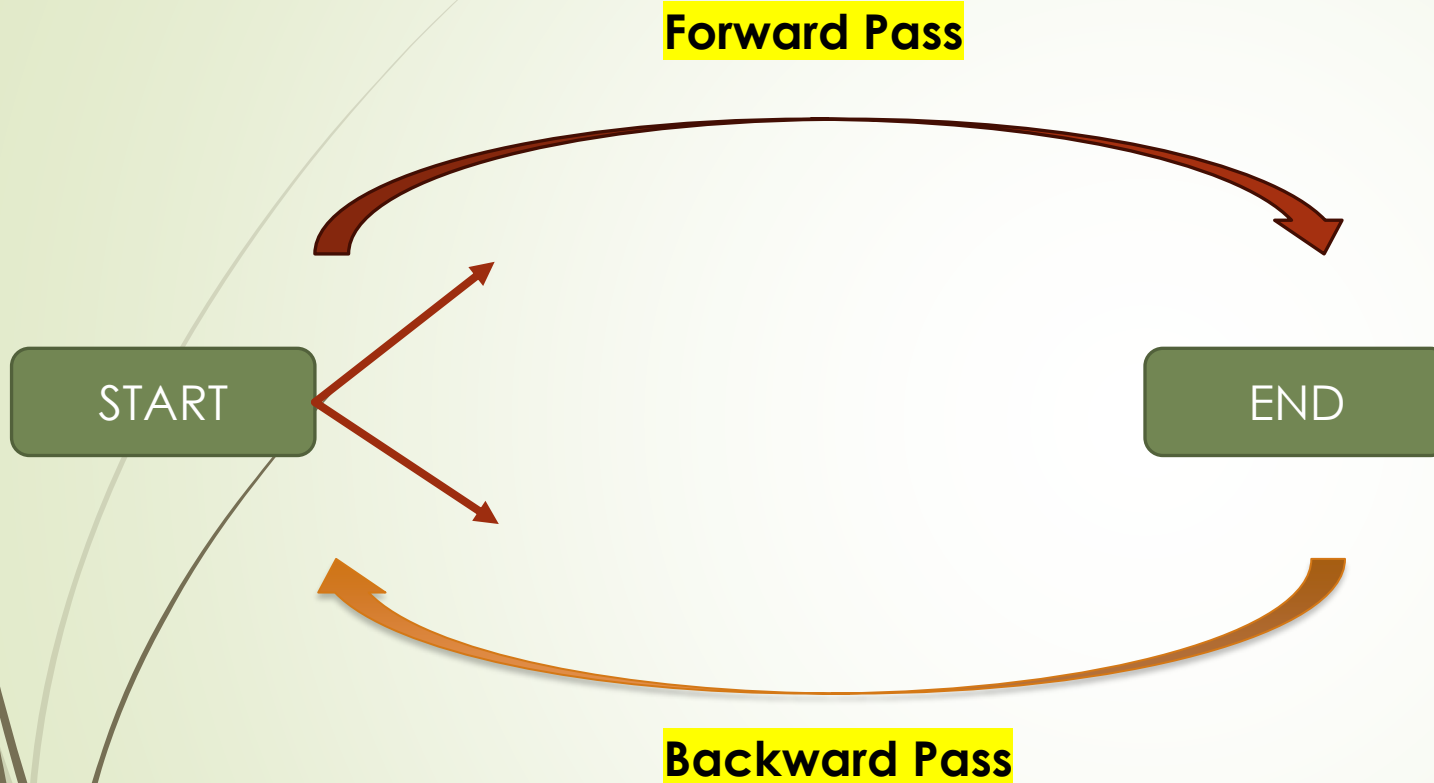
Forward Pass

Task	Earliest Start (ES)	Earliest Finish (EF)
Duration	Latest Start (LS)	Latest Finish (EF)

Backward Pass

END

Activity 2 Task 2: PERT



$$EF = ES + \text{time}$$
$$LS = LF - \text{time}$$

PERT Reference Block

Task	Forward Pass	
	Earliest Start (ES)	Earliest Finish (EF)
Duration	Latest Start (LS)	Latest Finish (LF)

Backward Pass



How to find the critical path?

- The activities that have a path from start to finish with **slack = 0** gives you the critical path.

Activity 2 Task 2: Slack

PERT Reference Block

Task	Earliest Start (ES)	Earliest Finish (EF)
Duration	Latest Start (LS)	Latest Finish (LF)

Slack

Slack or float = $LS - ES$ (or) $LF - EF$

START

END

A	ES:	EF:
D: 10	LS:	LF:

B	ES:	EF:
D: 2	LS:	LF:

D	ES:	EF:
D: 5	LS:	LF:

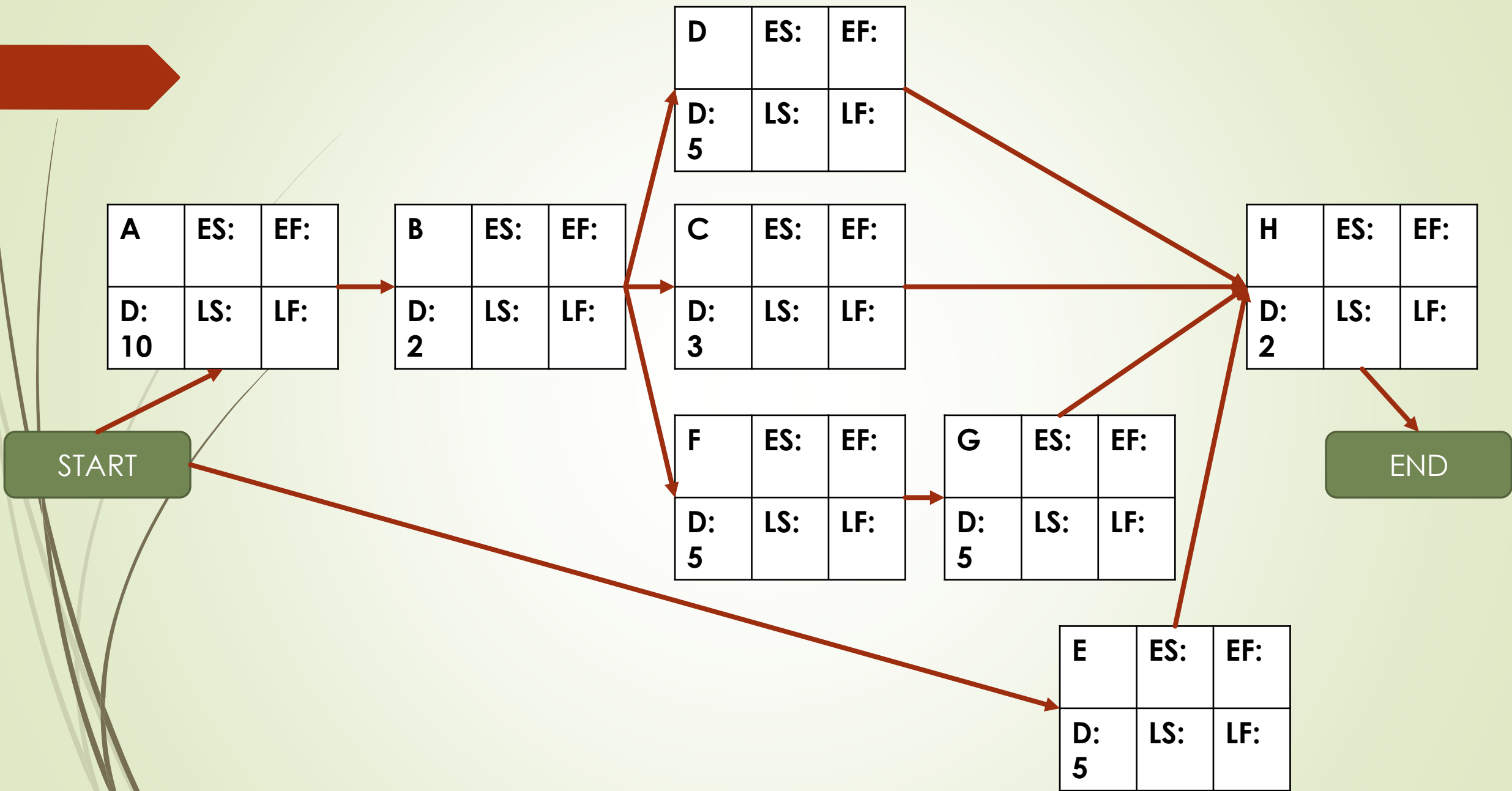
C	ES:	EF:
D: 3	LS:	LF:

F	ES:	EF:
D: 5	LS:	LF:

G	ES:	EF:
D: 5	LS:	LF:


H	ES:	EF:
D: 2	LS:	LF:

E	ES:	EF:
D: 5	LS:	LF:






Activity 2 Task 3: Critical Path Change due to Task Delay

- How will the critical path of the project get affected if Task C gets delayed by 3 days?
 - Slack of Task C?
- 



Activity 2 Task 4: Critical Path Change due to Task Delay

- How will the critical path of the project get affected if Task C gets delayed by 8 days?
 - Slack of Task C?
- 



Tutorial Quiz!

- ➡ You have 5 mins to complete the quiz