Similar to 2019 A3

Task	*Duration (days)*	*Prerequisites*
A	5	None
B	9	A
C	10	A & F
D	7	B & C
E	2	None
F	4	E
G	12	E
H	9	F & G
I	6	D & H

(a) Draw a directed graph representing the project, making sure to include a starting vertex S that has no predecessors and a terminal vertex Z that has no successors.

(b) List all paths from S to Z in the digraph from part (a) and, for each, find its total weight.

(c) By finding a critical path through the digraph from part (a), find the shortest amount of time in which the project can be completed.

(d) For each task, find both the earliest time (measured from the start of the project) at which it *could* start and the latest time by which it *must* start if the project is to be completed in minimal time.

This slide is available on Blackboard and at `https://bit.ly/32oV3aC`