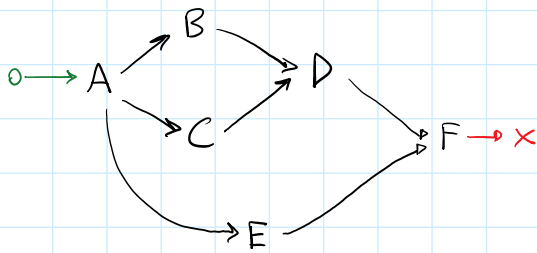


Consider the following DAG:



We can build a map of dependencies in two steps.

1) List the dependencies:

$F \leftarrow [D, E]$

$E \leftarrow [A]$

$D \leftarrow [B, C]$

$C \leftarrow [A]$

$B \leftarrow [A]$

$A \leftarrow \emptyset$

2) Build a map using the dependencies as keys, grouping the dependent nodes:

when_all(...).then(...)

$[F]: [x]$	$\rightarrow \text{len}(k) == \text{len}(v) \rightarrow$	linear	$\rightarrow k.then(v)$
$[D, E]: [F]$	$\rightarrow \text{len}(k) > \text{len}(v) \rightarrow$	join	$\rightarrow \text{when_all}(k...).then(v)$
$[B, C]: [D]$	$\rightarrow \text{len}(k) > \text{len}(v) \rightarrow$	join	$\rightarrow \text{when_all}(k...).then(v)$
$[A]: [E, C, B]$	$\rightarrow \text{len}(k) < \text{len}(v) \rightarrow$	Fork	$\rightarrow k.then(v...)$
$[0]: [A]$	$\rightarrow \text{len}(k) == \text{len}(v) \rightarrow$	linear	$\rightarrow k.then(v)$

Maybe the above map could be used to generate this?
 $\emptyset.then(A.then(, .., r-1))$

ϕ . then (A . then (

end. then (F)

when (D, E)

when (B, C)

))