P.E.R.T.

A project consists of a set of partially ordered jobs

a job has lower bound of time
Normal completion time.

$ dollars needed to
shorten the job by one unit
Each Job has three No.

absolute min time
normal completion time, Black
$C_{ij}$ per unit cost of shortening

Red
The longest path from 0 to 4

We shall spend $Money on the best arc in the critical path namely 2

until

(i) The arc is shortened to min
(ii) The path is no longer critical
1. Based on arc lengths, find all longest paths from \( S \) to \( T \).

Those are active arcs.

If an arc is shortened to min, then it is a rigid arc.

2. Consider \( c_{ij} \) of active arc.

As capacities of arcs

Find Min cuts separating \( S \) & \( T \).

Rigid arc has capacity \( \infty \).
Find the distance from V to every node.

If an active arc has length shorter than the difference of distance at its two nodes then we can increase its length & reduce costs.