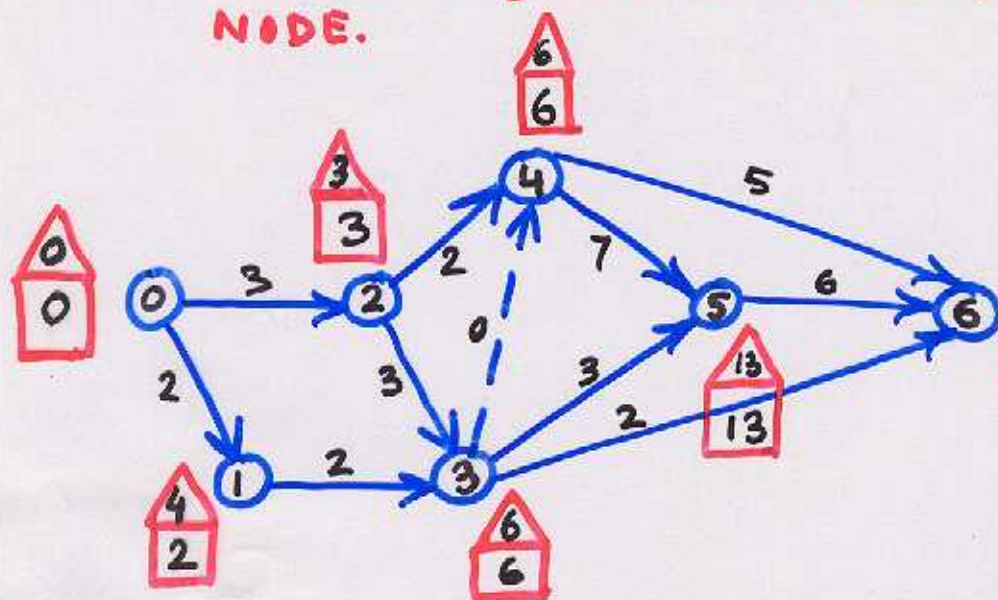


STEP 2: BACKWARD PASS

HERE COMPUTATION BEGINS WITH THE END NODE AND ENDS WITH THE FIRST NODE. THE AIM IS TO DETERMINE THE LATEST TIME BY WHICH AN EVENT i MUST OCCUR. THIS TIME IS LC_i AND SHOWN IN \triangle AGAINST EACH NODE.



TYPICALLY THESE TWO NUMBERS ARE MADE SAME. HOWEVER THE TOP NUMBER CAN REPRESENT THE DEADLINE OF THE PROJECT. THE COMP. DO NOT CHANGE. ONLY THE INTERPRETATION OF THE VALUES VARY AND WILL BE DISCUSSED LATER.

NOTE

$$LC_i = \min_j \{LC_j - D_{ij}\}$$

FOR EXAMPLE

$$\begin{aligned} LC_3 &= \min\{LC_4 - D_{34}, LC_5 - D_{35}, LC_6 - D_{36}\} \\ &= \min\{6 - 0, 13 - 3, 19 - 2\} \\ &= \min\{6, 10, 17\} \\ &= 6. \end{aligned}$$

DETERMINATION OF CRITICAL PATH

AN ACTIVITY (i, j) LIES ON THE CRITICAL PATH IF

- $ES_i = LC_i$
- $ES_j = LC_j$
- $ES_j - ES_i = D_{ij}$

HENCE $(0, 2)$, $(2, 3)$, $(3, 4)$, $(4, 5)$ AND $(5, 6)$ ARE THE ACTIVITIES WHICH CONSTITUTE THE CRITICAL PATH.