Notes and Comments on Lecture 7

Critical Path Example

To help the computation in pages 18, 19.

$$T_1 = 0;\ T_2 = \max[t_{12} + T_1] = 3$$

$$i \in S_2 \setminus S_1 = \{3\},\ T_3 = \max[t_{j3} + T_j] = \max[\overbrace{t_{13} + T_1}^{2+0=2}, \overbrace{t_{23} + T_2}^{1+3=4}] = 4,\ j \in S_1 = \{1,2\}$$

$$i \in S_3 \setminus S_2 = \{4\},\ T_4 = \max[t_{j4} + T_j],\ j \in S_2 = \{1,2,3\}$$
$$= \max[\overbrace{t_{14} + T_1}^{0+0=0}, \overbrace{t_{24} + T_2}^{2+3=5}, \overbrace{t_{34} + T_3}^{2+4=6}] = 6$$

$$i \in S_4 \setminus S_3 = \{5\},\ T_5 = \max[t_{j5} + T_j],\ j \in S_3 = \{1,2,3,4\}$$
$$= \max[\overbrace{t_{15} + T_1}^{0+0=0}, \overbrace{t_{25} + T_2}^{0+3=3}, \overbrace{t_{35} + T_3}^{0+4=4}, \overbrace{t_{45} + T_4}^{4+6=10}]] = 10 \quad \square$$