Deadlock Detection

Several Instances of a Resource Type

Tape drives, Plotters, Scanners, CD Roms

$E = (4 \quad 2 \quad 3 \quad 1)$

Tape drives, Plotters, Scanners, CD Roms

$A = (2 \quad 1 \quad 0 \quad 0)$

$$\begin{array}{cc} A & R \\ (2\,1\,0\,0) & \geq R_3, (2\,1\,0\,0) \\ (2\,2\,2\,0) & \geq R_2, (1\,0\,1\,0) \\ (4\,2\,2\,1) & \geq R_1, (2\,0\,0\,1) \end{array}$$

Current allocation matrix

$$C = \begin{bmatrix} 0 & 0 & 1 & 0 \\ 2 & 0 & 0 & 1 \\ 0 & 1 & 2 & 0 \end{bmatrix}$$

Request matrix

$$R = \begin{bmatrix} 2 & 0 & 0 & 1 \\ 1 & 0 & 1 & 0 \\ 2 & 1 & 0 & 0 \end{bmatrix}$$