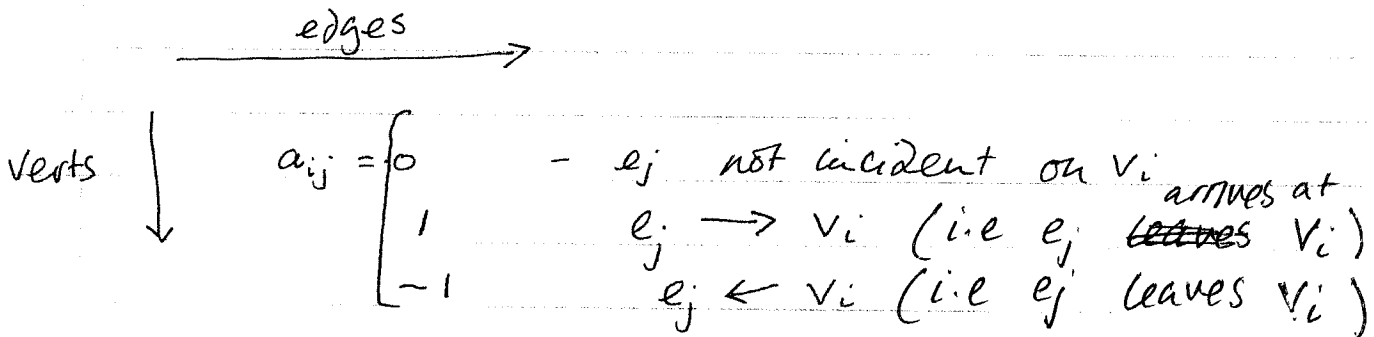


Flows, cuts and linear programs.

For a directed graph, write an incidence matrix A



Make row 1 correspond to s (source)
 row 2 correspond to d (drain)

versions:

$$\begin{aligned} & \max \quad v \\ \text{st} \quad & A f + v \begin{bmatrix} -1 \\ 1 \\ 0 \\ \vdots \end{bmatrix} = 0 \\ & f \geq 0 \quad \quad f \leq c \end{aligned}$$

flow

