

GRAPH REPRESENTATIONS

A graph is a pair (V, E) where V is the vertex set and $E \subseteq V \times V$ is the edge set. $n = |V|$, $m = |E|$



Two representations:

- Adjacency Matrix

- Adjacency List

$$M_a = \begin{bmatrix} & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \end{bmatrix} \in \{0, 1\}^{n \times n}$$

$$L_a = \text{list}$$

$$m_{ij} = 1 \iff (i, j) \in E$$

