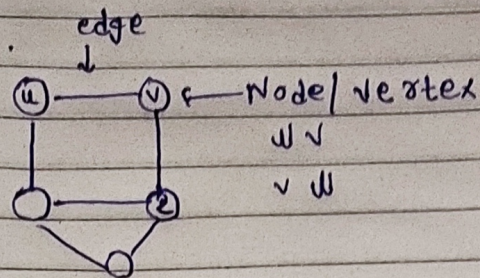


## \* Graph ÷ Type



(a) Undirected graph

$$\text{Total} = 2 \times E$$

$$= 2 \times 6$$

$$\rightarrow \text{degree}(2) = 3$$

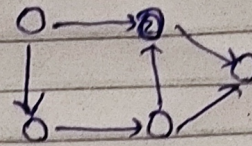
→ Path

\* cyclic graph

• Weighted graph

\* Acyclic graph

• non-weighted graph



(b) Directed graph

$$\rightarrow \text{InDegree}(2) = 2$$

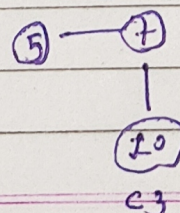
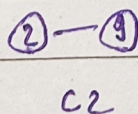
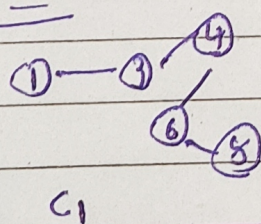
$$\rightarrow \text{OutDegree}(2) = 2$$

## \* Graph Representation:

① → Adjacency Matrix

② → Adjacency List Representation:

## \* Connected Components in a graph:



→ write code for multiple components using visited array.