Graphs

→ Intro to graphs
→ Types of graphs
→ unweighted, non-connected
→ weighted, unweighted
→ ↓
→ Basic terminologies
→ Tree terminologies
→ ↓
→

X ——— X

Graph

collection of **vertices** and **edges**

vertices (nodes) are connected with edges.

$G = (V, E)$ Graph

V → set of vertices
E → set of edges

$V = \{A, B, C, D, E\}$
$E = \{(A,C), (A,B), (B,C), \ldots\}$

$G = (\{A, C\}, \{C\})$

graph terminology

vertices (nodes) → A, C, D, E, B

edges (connecting lines also called edges)

Edges

directed edge — undirected edge

one way road — two way road

graph is which only contains directed edge called a directed graph.

Eg: DC directional → possible
vice versa → Integer

Edges

directed edge — undirected edge

weight
weight
weight