📘 2. Graph – Data Structure

◆ **Definition:**

A **Graph** is a collection of **nodes (vertices)** and **edges (connections)** between them.

◆ **Types of Graphs:**

- **Directed / Undirected**

- **Weighted / Unweighted**

- **Cyclic / Acyclic**

- **Connected / Disconnected**

◆ **Representation:**

- **Adjacency Matrix**

- **Adjacency List**

◆ **Traversal Algorithms:**

- **DFS (Depth-First Search)**

- **BFS (Breadth-First Search)**

- **Applications:**

- Maps and GPS

- Social networks

- Web crawling

- Network routing
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