

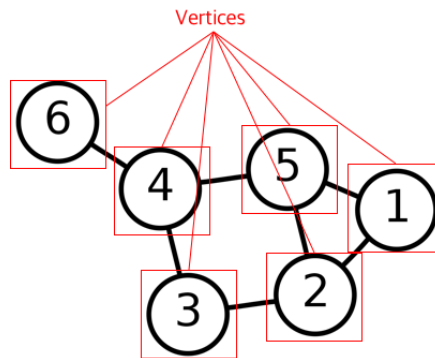
CSC373 Worksheet 4 Solution

August 3, 2020

1. Notes:

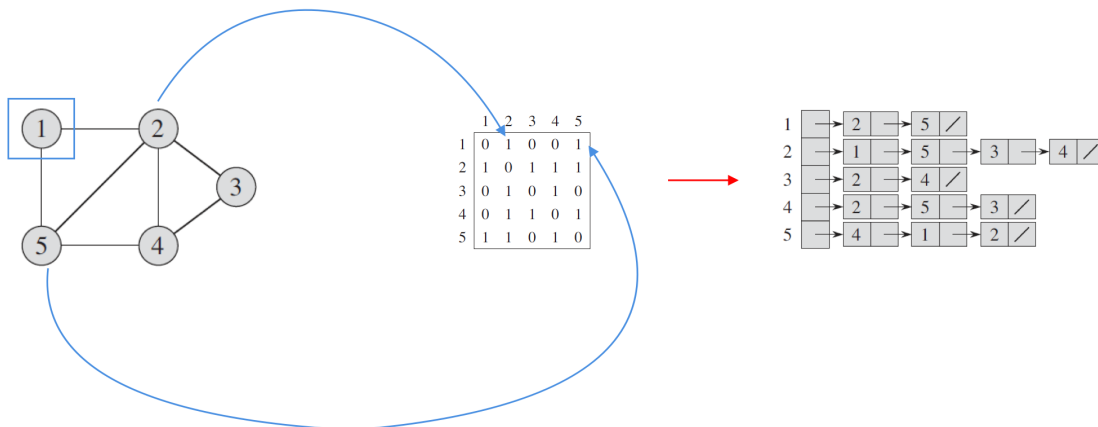
• Vertex

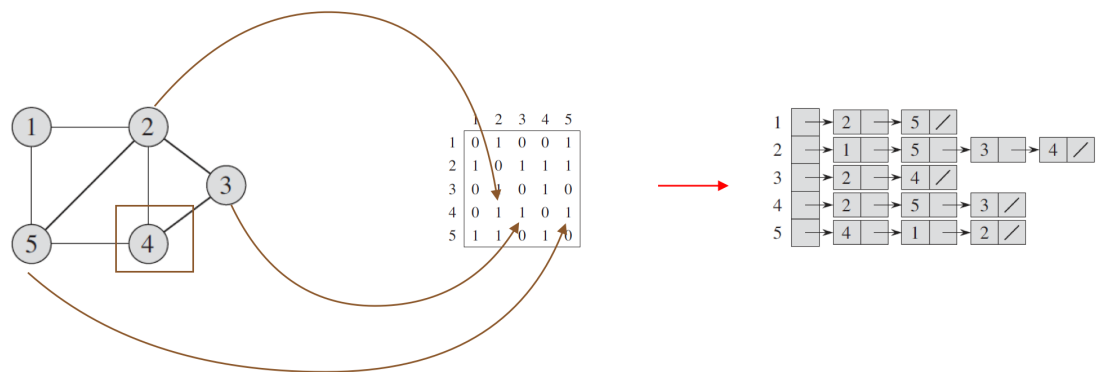
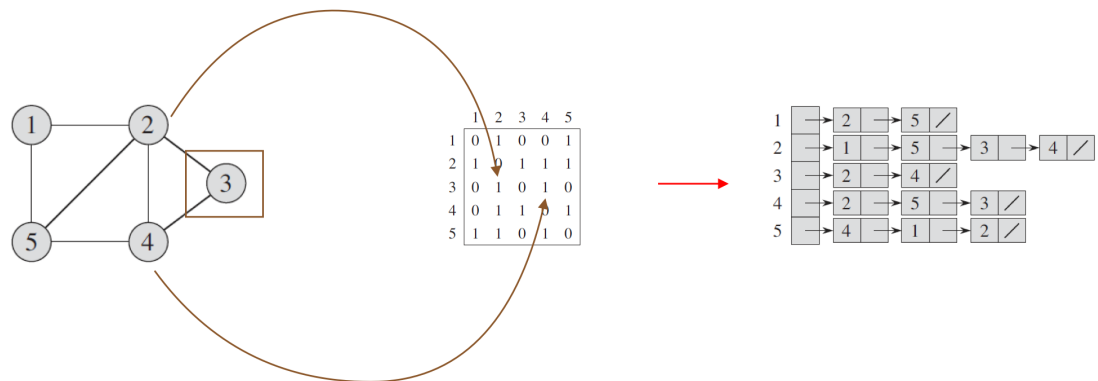
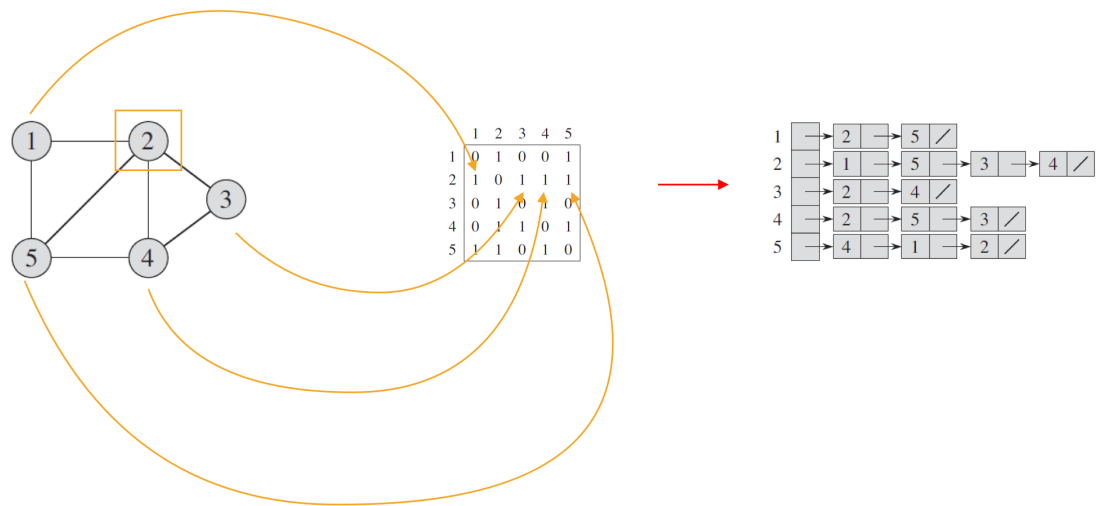
- Is a fundamental unit of which graphs are formed
- Also means node

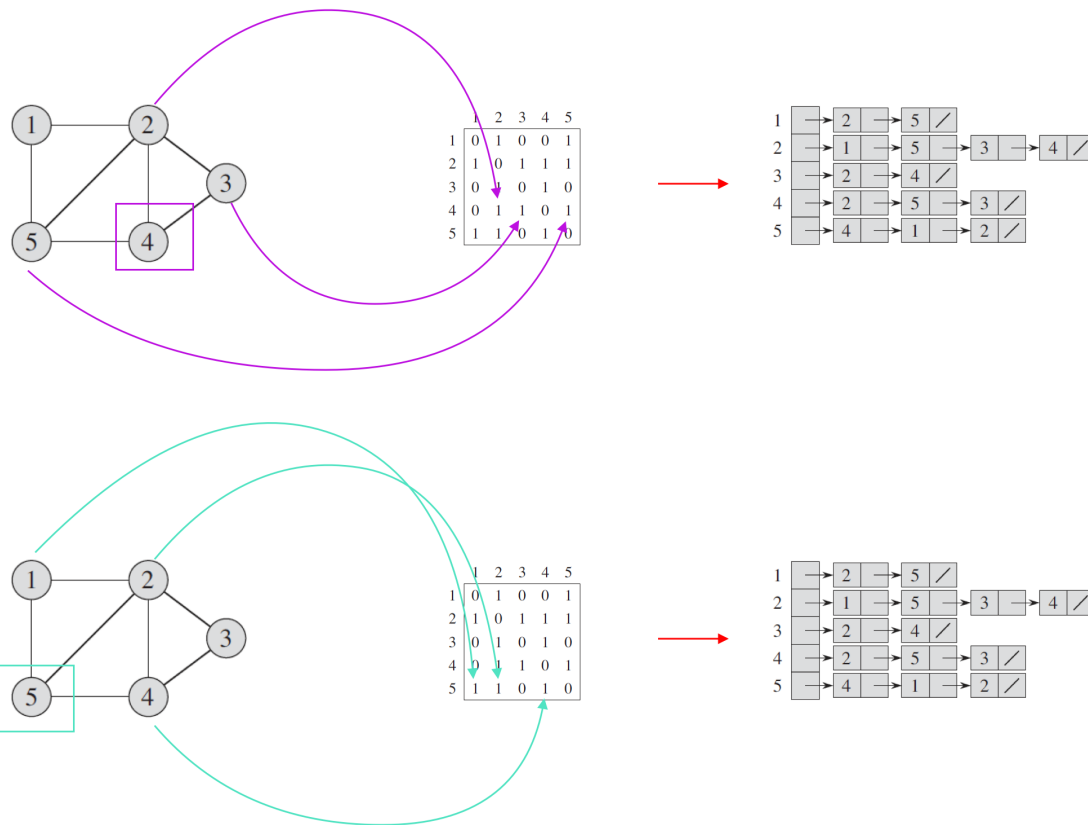


• Adjacency-list Representation

- Associates each vertex in a graph with the collection of its neighbouring vertices or edges

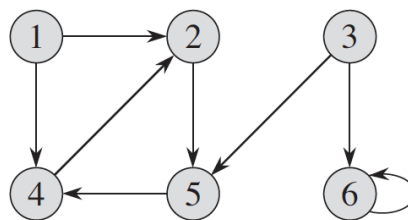






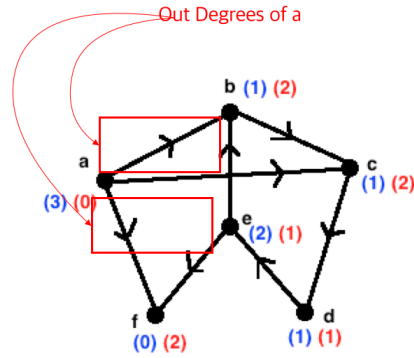
• Directed graph

- Is a graph that is made up of a set of vertices connected by edges, where the edges have a direction associated with them



• Out-degrees

- For a directed graph $G = (V(G), E(G))$ and a vertex $x_1 \in V(G)$, the Out-Degree of x_1 refers to the number of arcs incident from x_1 . That is, the number of arcs directed away from the vertex x_1 .



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