

Walks, Paths and Conectivity

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April 26, 2020

1 Walks

A walk is a sequence of vertices and edges of a graph i.e. if we traverse a graph then we get a walk. Vertex can be repeated Edges can be repeated

2 Trails

A Walk in which no edge is repeated then is called a trail. Vertex can be repeated Edges not repeated

3 Circuit

Traversing a graph such that no edges are repeated but vertices can be and it is closed also. ex. it is a closed trail. Vertex can be repeated Edge not repeated

4 Path

It is a trail in which neither vertices nor edges are repeated i.e. if we traverse a graph such that we do not repeat a vertex and nor we repeat an edge. Vertex not repeated Edge not repeated

5 Cycle

Traversing a graph such that we do not repeat a vertex nor we repeat a edge but the starting and ending vertex must be same i.e. we can repeat starting and ending vertex only then we get a cycle. Vertex not repeated Edge not repeated