Graphs

Reference: <https://interactivepython.org/runestone/static/pythonds/Graphs/toctree.html>

Contains:

1. Vertex
2. Edges
3. Weights
4. Path
5. Cycle

1

3

3

2

1

2

2

Consider the example shown above.

Vertex = { *V0, V1, V2, V3, V4* }

Edges = { (V1,V1,3), (V1,V3,3), (V0,V1,1), (V0,V3,2) , (v2,V0,2), (V2,V3,1), (V2,V4,2)}

Path = V1 to V3

Path1. {V1,V2,V3}

Path2 {V1,V2,V0,V3}

Cycle= {V1,V2,V0,V1}

A graph with no cycle is Acyclic graph

A directed graph with no cycles is Directed Acyclic Graph (DAG)