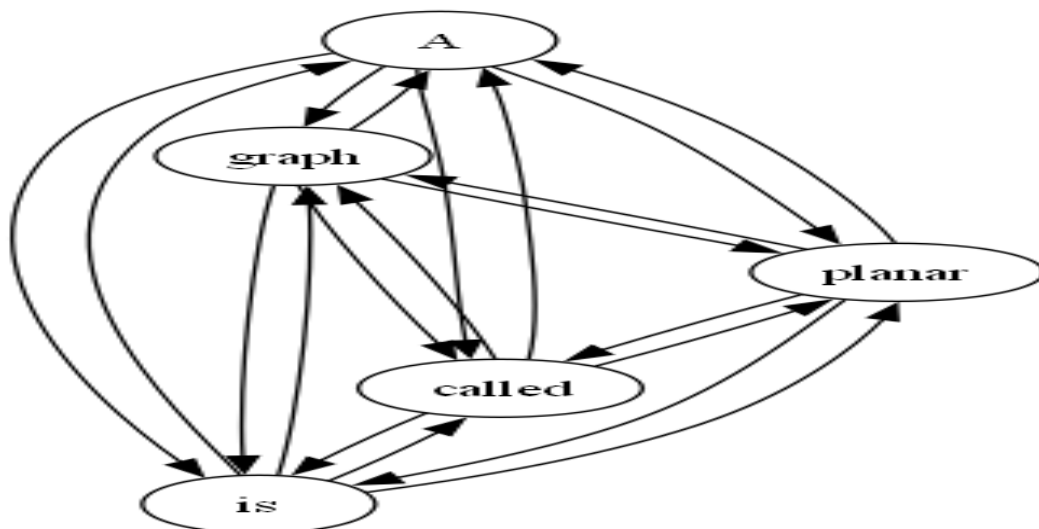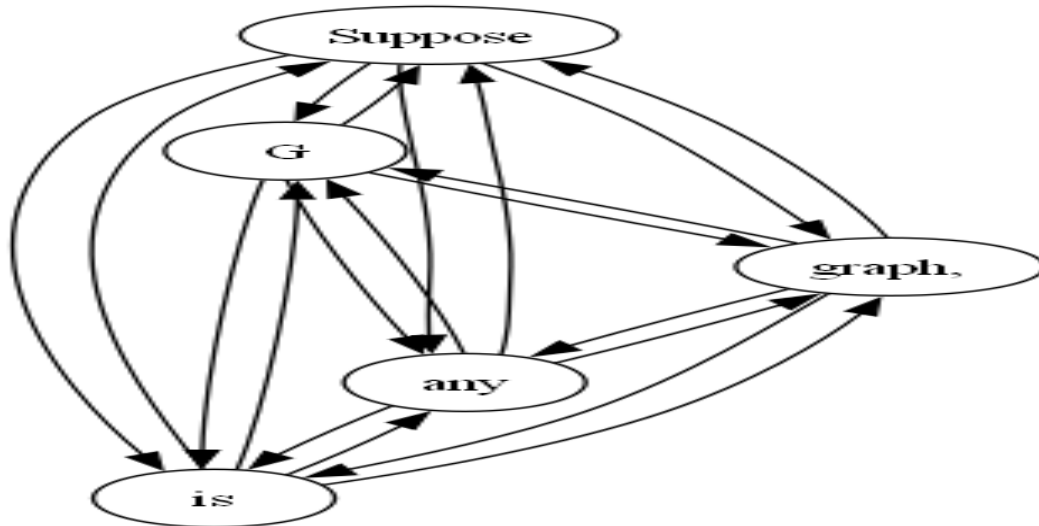A path in a graph is said to be an Eulerian path if it traverses each edge in the graph once and only once. A path which contain every vertices of a graph G exactly on the same side is called Hamiltonian Graph. A circuit that passes through each of the vertices in a group except the starting & end vertices is called a Hamiltonian circuit. The concept of isomorphism brings us to the concept of 'mathy'.
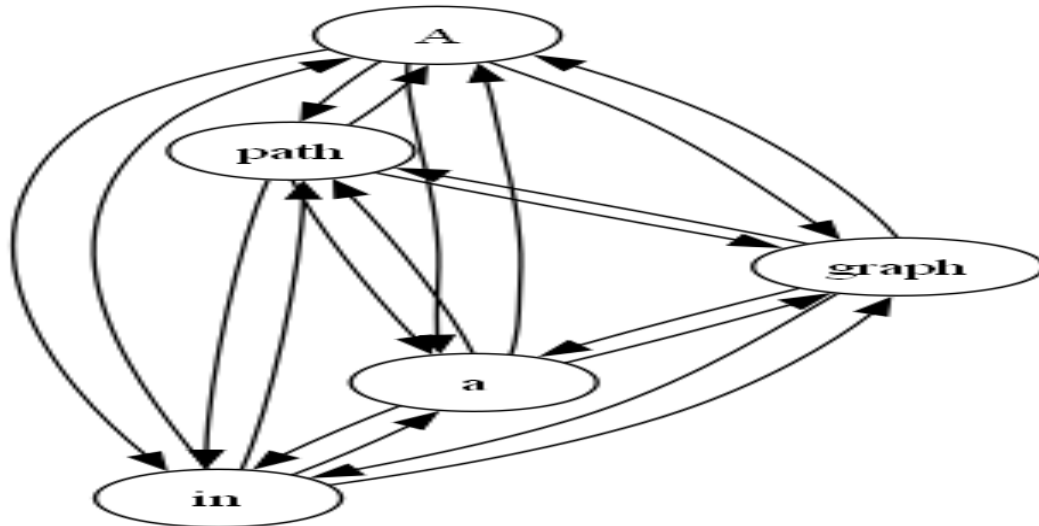
A graph is called planar if it can be drawn in the plane without any edges crossing. A graph may be planar even if it is usually drawn with crossings, because it may be possible to draw it in a different way without crossings. The total degree of a graph is even. In any graph there are an even number of vertices of odd degrs. Theorem 10.1.1: All graphs have the same degree sequence structure.

Suppose G is any graph, and suppose G has n vertices of odd degree and m verticesof even degree, where n is a positive integer and m 1s a nonnegative integer. Let E be the sum of the degrees of all the Vertices of evendegree. Let O be theSum of the Degrees ofVertices ofodd degree. Let T be the total degree of G, which is an even integer.

Quiz

Q: A path in a graph is said to be an Eulerian path if it traverses each edge in the graph once and only once?

A: A path which contain every vertices of a graph G exactly on the same side is called Hamiltonian Graph

Q: A graph is called planar if it can be drawn in the plane without any edges crossing?

A: A graph may be planar even if it is usually drawn with crossings, because it may be possible to draw it in a different way without crossings

Q: Suppose G is any graph, and suppose G has n vertices of odd degree and m verticesof even degree, where n is a positive integer and m 1s a nonnegative integer?

A: Let E be the sum of the degrees of all the Vertices of evendegree

Flashcards

Front: A path in a graph is said to be an Eulerian path if it traverses each edge in the graph once and only once?

Back: A path which contain every vertices of a graph G exactly on the same side is called Hamiltonian Graph

Front: A graph is called planar if it can be drawn in the plane without any edges crossing?

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Front: Suppose G is any graph, and suppose G has n vertices of odd degree and m verticesof even degree, where n is a positive integer and m 1s a nonnegative integer?

Back: Let E be the sum of the degrees of all the Vertices of evendegree