There are several libraries available for implementing graphs in various programming languages. Here are a few popular ones:

1. NetworkX (Python): NetworkX is a Python library used for creating, manipulating, and studying the structure, dynamics, and functions of complex networks or graphs. It provides an extensive set of tools and algorithms for graph analysis. Here's an example of creating a graph using NetworkX:

import networkx as nx

# Create an empty graph

G = nx.Graph()

# Add nodes

G.add\_node(1)

G.add\_node(2)

G.add\_node(3)

# Add edges

G.add\_edge(1, 2)

G.add\_edge(2, 3)

# Print the graph

print(G.nodes()) # [1, 2, 3]

print(G.edges()) # [(1, 2), (2, 3)]

1. igraph (R, Python, C, and more): igraph is a collection of libraries for creating and manipulating graphs. It supports several programming languages, including R, Python, and C. Here's an example of creating a graph using igraph in Python:

from igraph import Graph

# Create an empty graph

g = Graph()

# Add vertices

g.add\_vertices(3)

# Add edges

g.add\_edges([(0, 1), (1, 2)])

# Print the graph

print(g.vs.indices) # [0, 1, 2]

print(g.get\_edgelist()) # [(0, 1), (1, 2)]

1. JGraphT (Java): JGraphT is a Java library for graph data structures and algorithms. It provides a wide range of graph algorithms and supports various graph types. Here's an example of creating a graph using JGraphT:

import org.jgrapht.Graph;

import org.jgrapht.graph.DefaultEdge;

import org.jgrapht.graph.SimpleGraph;

// Create a simple undirected graph

Graph<Integer, DefaultEdge> graph = new SimpleGraph<>(DefaultEdge.class);

// Add vertices

graph.addVertex(1);

graph.addVertex(2);

graph.addVertex(3);

// Add edges

graph.addEdge(1, 2);

graph.addEdge(2, 3);

// Print the graph

System.out.println(graph.vertexSet()); // [1, 2, 3]

System.out.println(graph.edgeSet()); // [(1,2), (2,3)]

These are just a few examples of libraries for implementing graphs. Depending on your programming language and requirements, you can explore these libraries or search for others that might be more suitable for your specific needs.