What is a graph?

Explain Dijkstra's shortest path algorithm. Calculate the shortest path of the following graph using Dijkstra's algorithm.

A diagram of a tree

Description automatically generated

What is Greedy algorithm?

What is dynamic programming?

Explain BFS?

Explain Dijkstra's shortest path algorithm. Find the shortest path from the Node 1 to Node 4 using Dijkstra's algorithm.

A diagram of a diagram

Description automatically generated

How is graph different with Tree? What is the different method of graph representation?

What is Minimum Spanning Tree? Calculate MST of the following graph using Prim's algorithm

A diagram of a number

Description automatically generated

What is the different method of graph representation technique?

What is Minimum Spanning Tree? Calculate MST of the following graph using Kruskal's Minimum Spanning Tree Algorithm.

A diagram of a triangle with circles and lines

Description automatically generated

Explain Depth first search algorithm?

Explain Dijkstra shortest path algorithm. Find the shortest path from Node A to Node C using Dijkstra algorithm.

A diagram of a diagram

Description automatically generated

What is the different method of graph representation technique?

What is Minimum Spanning Tree? Calculate MST of the following graph using Kruskal's Minimum Spanning Tree Algorithm.

A diagram of a network

Description automatically generated

Define cyclic and acyclic graph with an example of each.

What do you mean by single source shortest path problem? Write and explain Dijkstra's algorithm with suitable example.

Define graph data structure.

Define topological sort with a suitable example.

How many edges are there in a complete graph having 10 vertices?

What are the differences between Kruskal's and Prim's algorithm that finds MST?

Determine the breadth first and depth first topological sorting for the following graph.

A diagram of a network

Description automatically generated

Explain the concept of minimum spanning tree (MST) and find MST for the following graph using Kruskal's algorithm: [2+6]

A close up of a diagram

Description automatically generated

Differentiate between breadth first and depth first search algorithms.

Create a minimum spanning tree for the following graph using Kruskal's algorithm.

Differentiate between breadth first and depth first search algorithms. Create a minimum spanning tree for the following graph using Kruskal's algorithm.

A diagram of a network with Silverstone Circuit in the background

Description automatically generated

Define minimum spanning tree with an example. Show step-by-step solution to find the minimum spanning tree of the given graph using Prim's algorithm.

A diagram of a network

Description automatically generated

Define depth first and breadth first traversal. Construct the minimum spanning tree (MST) for the given graph using Kruskal's algorithm.

A diagram of a network

Description automatically generated

What are different representation methods of graphs? Explain Kruskal's algorithm to find the Minimum Spanning Tree with an example.

Write an algorithm for Warshall's algorithm and illustrate with an example.

Explain depth-first traversal in a graph. Create a minimum spanning tree for the following graph using Kruskal's algorithm.

A diagram of a network

Description automatically generated

Write an algorithm for Warshall's algorithm with a suitable example. Define breadth-first traversal and depth-first traversal with an example. Define Kruskal's algorithm with a suitable exampleWrite an algorithm for Warshall's algorithm with a suitable example. Define breadth-first traversal and depth-first traversal with an example. Define Kruskal's algorithm with a suitable example

Explain a breadth-first traversal in a graph with a suitable example. Explain Kruskal's algorithm to find the minimum spanning tree with a suitable example.

What are the implementation differences between round robin and Kruskal's algorithms? Use Dijkstra's algorithm to find the shortest path from node A to other nodes

in the given graph.

A diagram of a number of circles and arrows

Description automatically generated

Define in-degree and out-degree in a directed graph. Discuss the Depth First Traversal (DFT) and Breadth-First Traversal (BFT) with suitable examples.

Write short notes on:

* Transitive Closure Graph

Define directed, undirected graph, spanning forest, minimum spanning trees.

Explain Dijkstra's algorithm for finding the shortest path with the help of an algorithm.