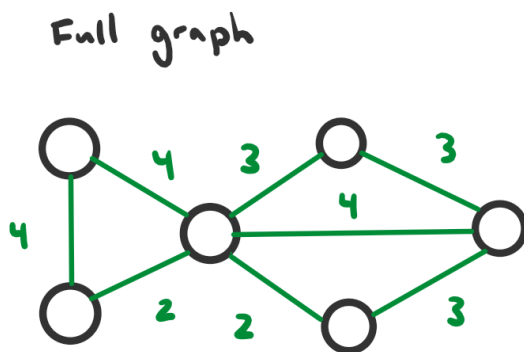


ENSF338 Exercise 3 Question 1

Explain what a minimum spanning tree is, with an example (a simple graph with 5 to 10 nodes is sufficient).

A minimum spanning tree is a tree that spans all the vertices of a graph with the lowest possible total edge weight. To ensure this, the tree is free of cycles, making it acyclic. These trees are commonly constructed using Kruskal's algorithm, which begins by arranging all edges in ascending order of weight and then selectively incorporating them into the tree to avoid forming cycles.



Minimum Spanning Tree

