Greedy Algorithms

Learning Objectives

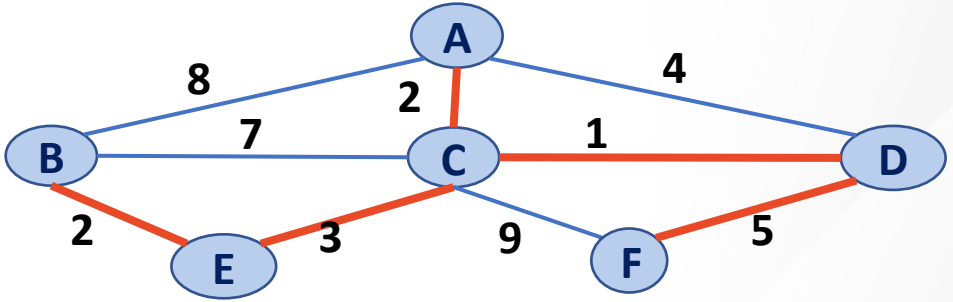
1. Review Minimum Spanning Tree Problem
2. Understand what a greedy algorithm is

Minimum Spanning Tree Algorithm

Input: Connected, undirected graph **G** with edge weights

Output: A graph G' with the following properties:

- G' is a spanning graph of G
- G' is a tree (connected, acyclic)
- G' has a minimal total weight among all spanning trees



Greedy Algorithms

Locally optimal decisions are made in hope of being globally optimal