

Spanning Trees and Kruskal's Algorithm

Dr. Chuck Rocca
roccac@wcsu.edu

<http://sites.wcsu.edu/roccac>



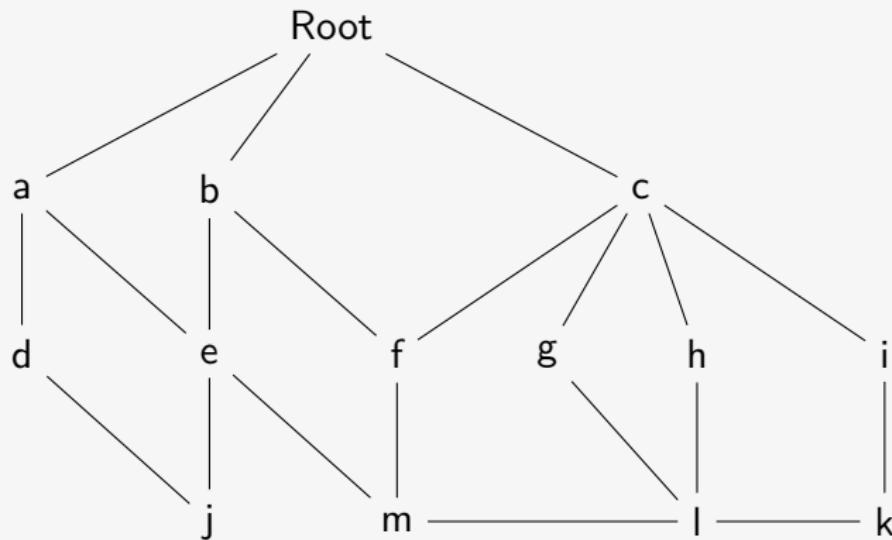
Table of Contents

1 Spanning Trees

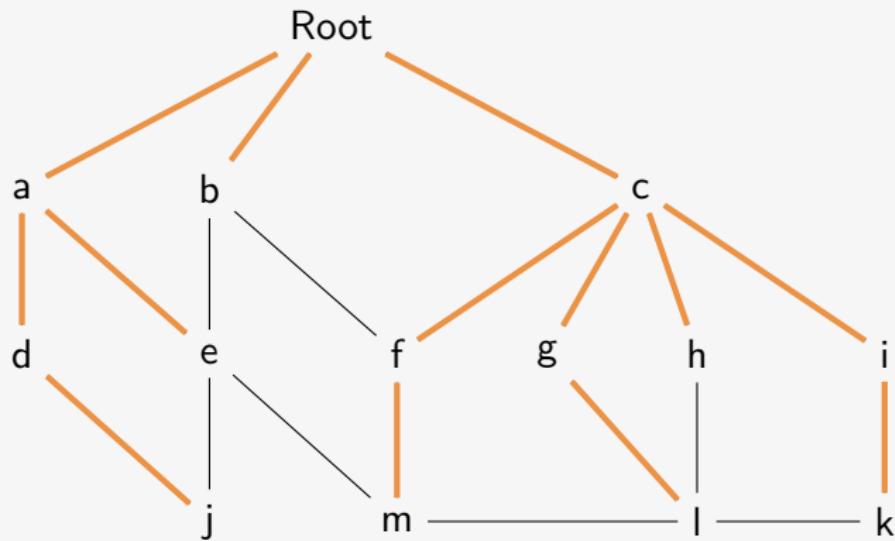
2 Kruskal's Algorithm



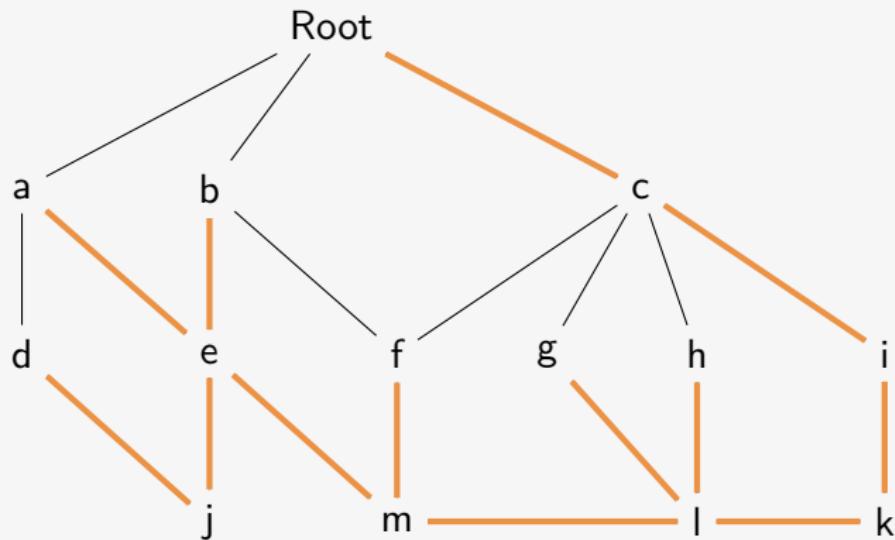
Spanning Tree Definition and Examples



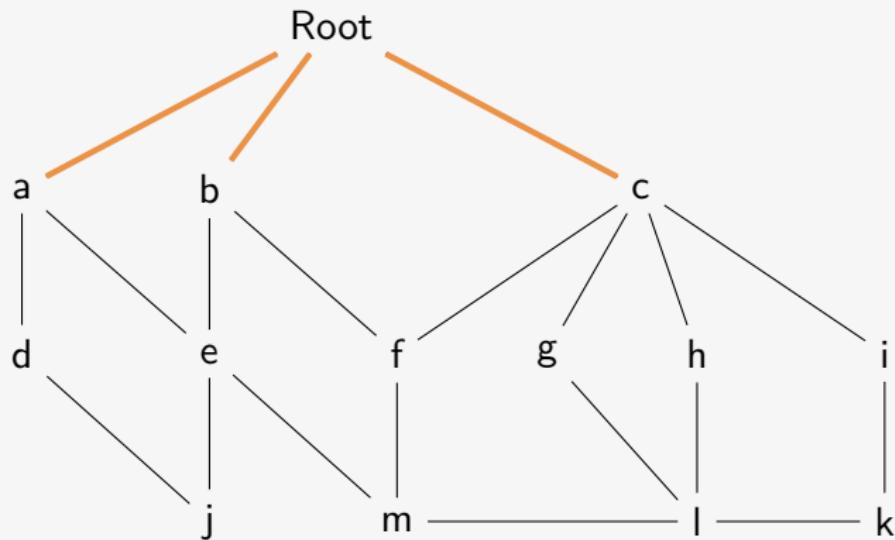
Spanning Tree Definition and Examples



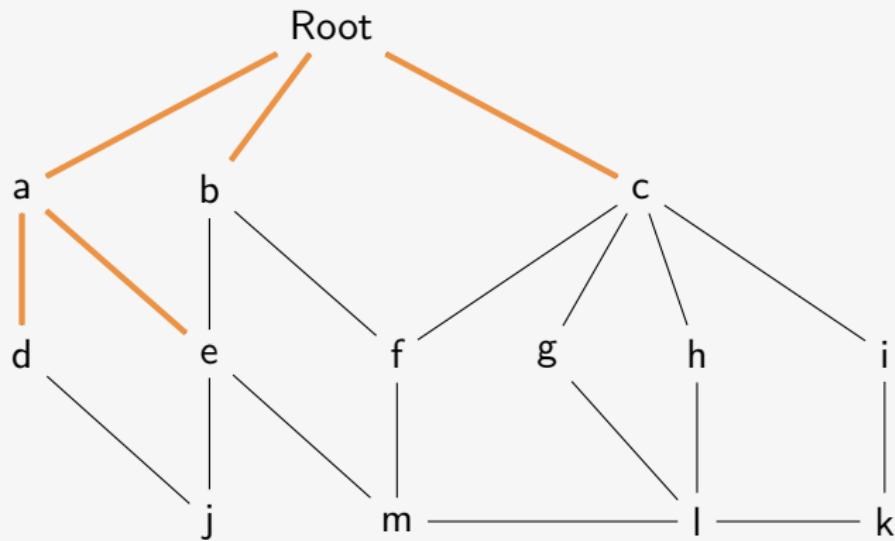
Spanning Tree Definition and Examples



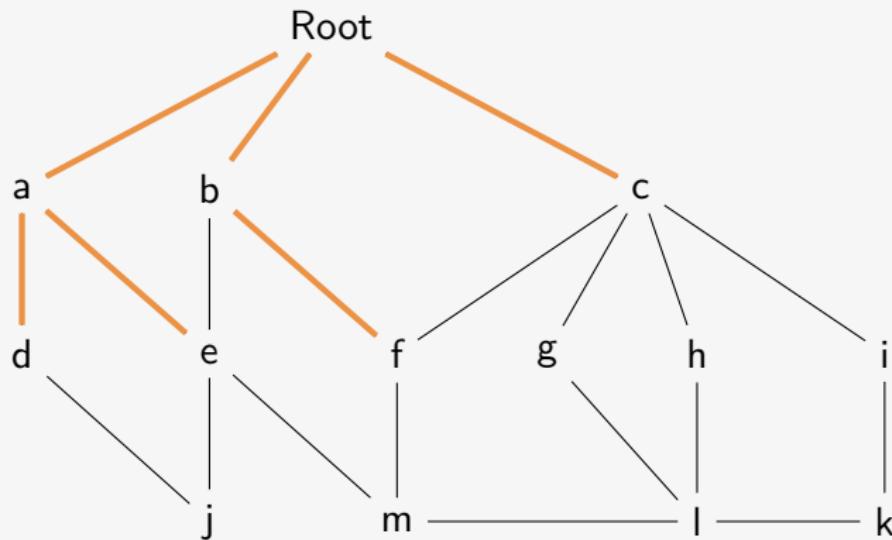
Spanning Tree Definition and Examples



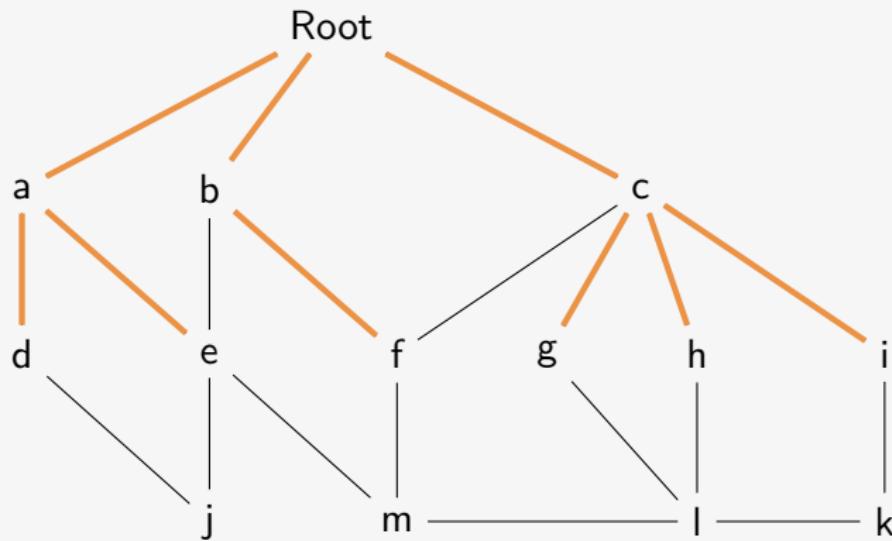
Spanning Tree Definition and Examples



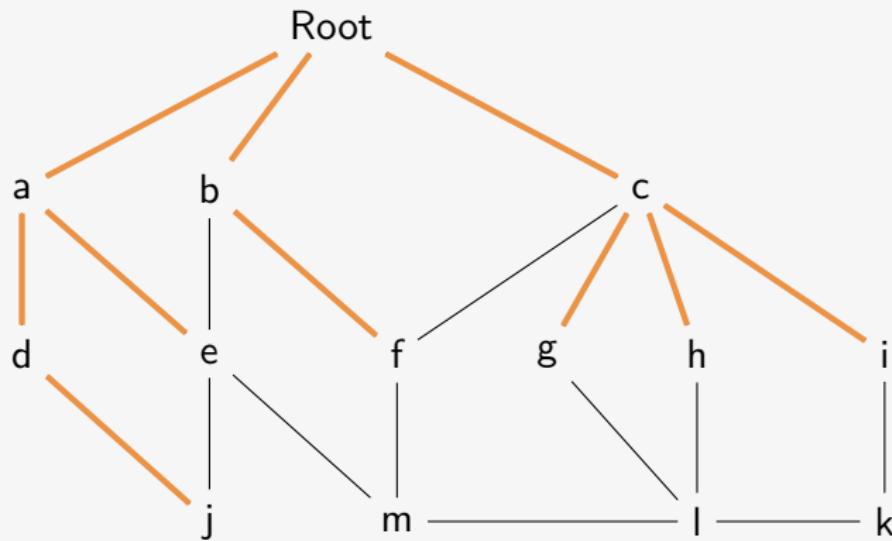
Spanning Tree Definition and Examples



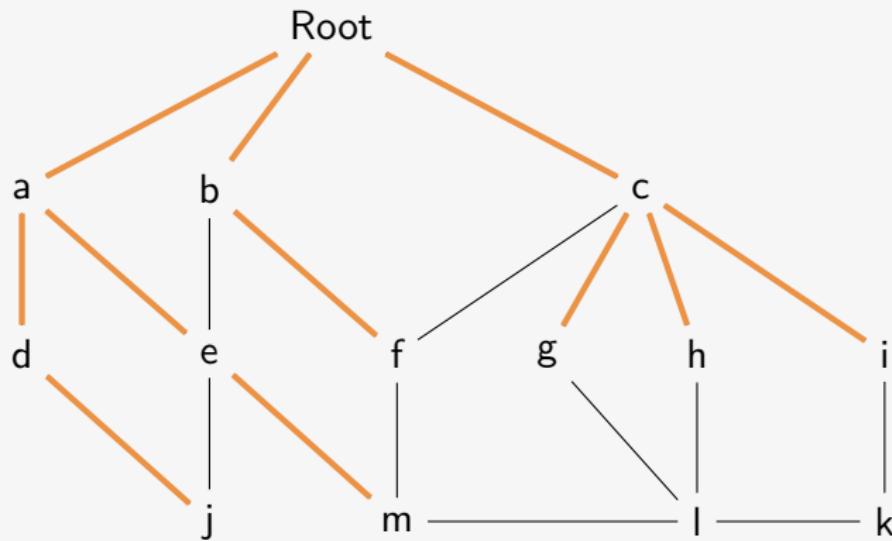
Spanning Tree Definition and Examples



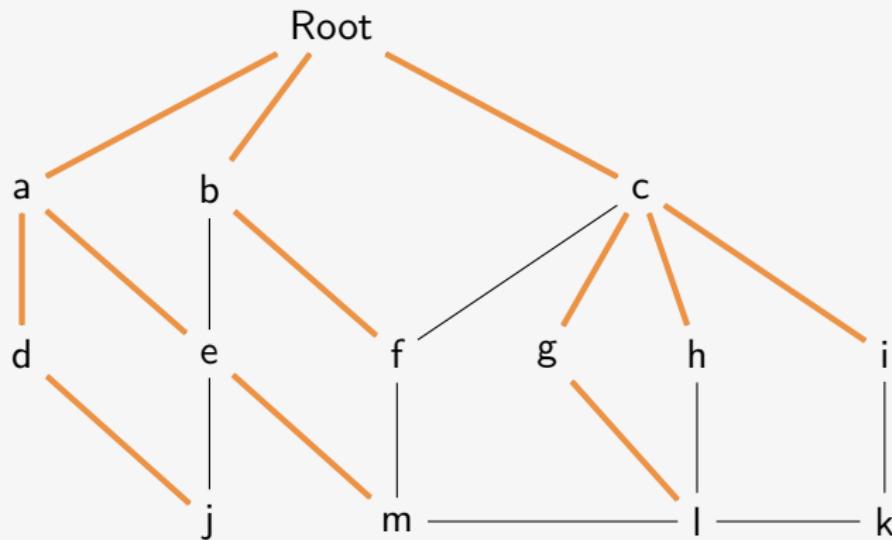
Spanning Tree Definition and Examples



Spanning Tree Definition and Examples



Spanning Tree Definition and Examples



Spanning Tree Definition and Examples

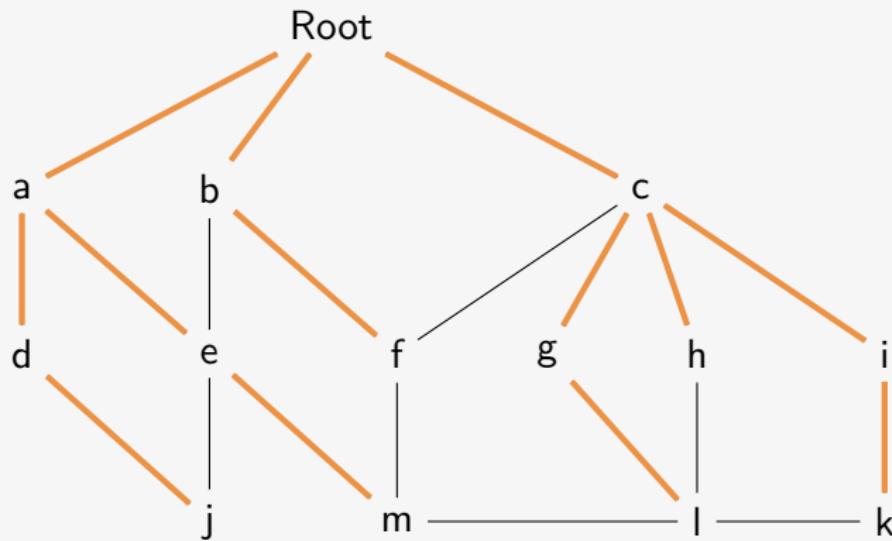


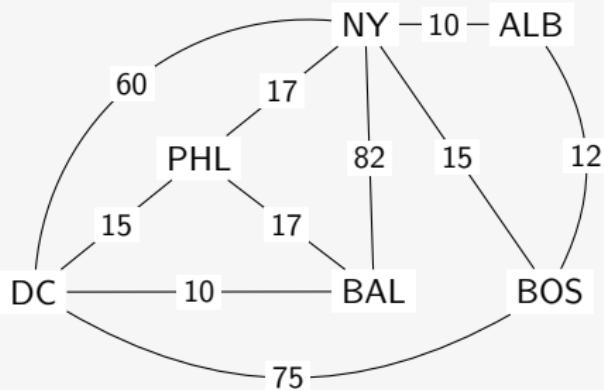
Table of Contents

1 Spanning Trees

2 Kruskal's Algorithm



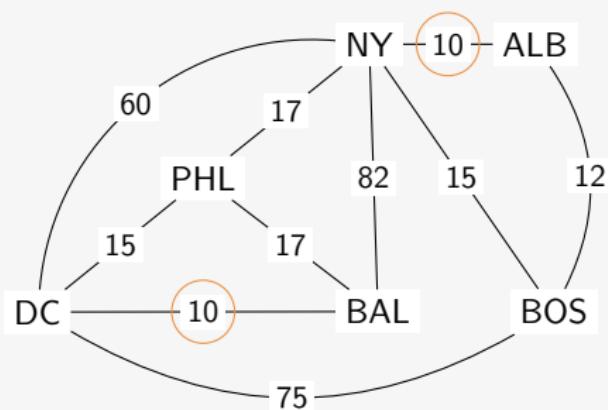
Kruskal's Minimal Tree Algorithm



- Find the unused edge with the lowest value
- If it doesn't create a circuit add it to the tree
- Repeat until there are $n - 1$ edges



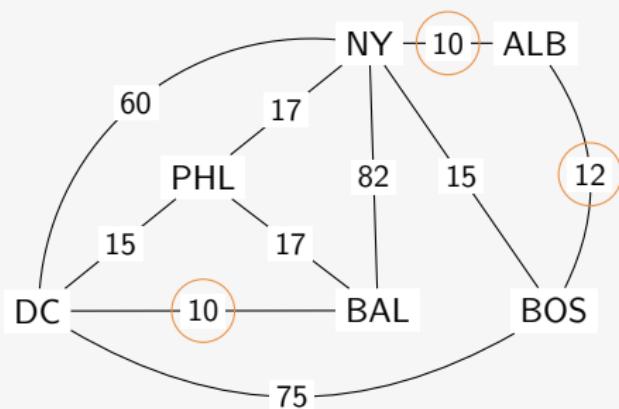
Kruskal's Minimal Tree Algorithm



- Find the unused edge with the lowest value
- If it doesn't create a circuit add it to the tree
- Repeat until there are $n - 1$ edges



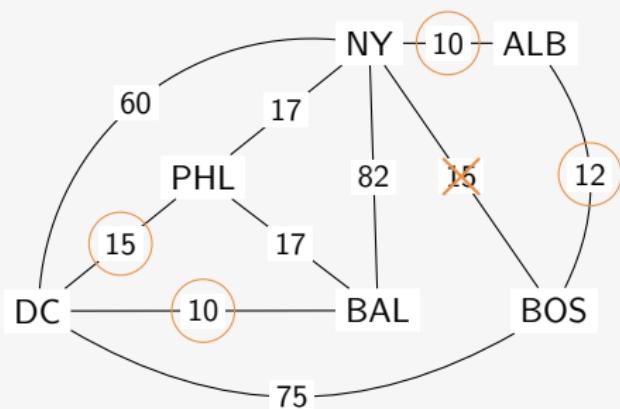
Kruskal's Minimal Tree Algorithm



- Find the unused edge with the lowest value
- If it doesn't create a circuit add it to the tree
- Repeat until there are $n - 1$ edges



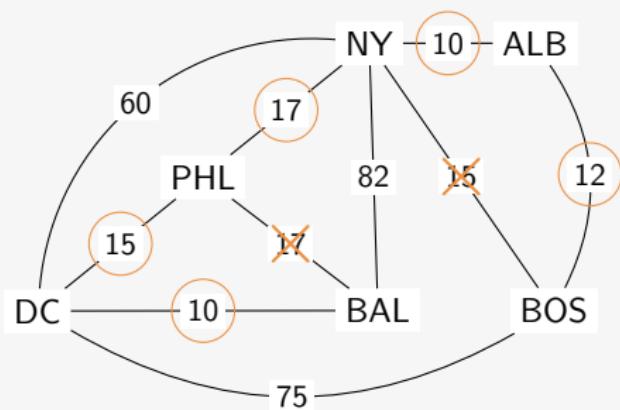
Kruskal's Minimal Tree Algorithm



- Find the unused edge with the lowest value
- If it doesn't create a circuit add it to the tree
- Repeat until there are $n - 1$ edges



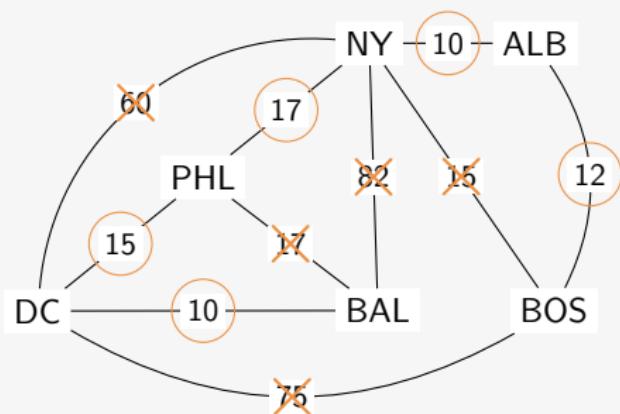
Kruskal's Minimal Tree Algorithm



- Find the unused edge with the lowest value
- If it doesn't create a circuit add it to the tree
- Repeat until there are $n - 1$ edges



Kruskal's Minimal Tree Algorithm



- Find the unused edge with the lowest value
- If it doesn't create a circuit add it to the tree
- Repeat until there are $n - 1$ edges



Spanning Trees and Kruskal's Algorithm

Dr. Chuck Rocca
roccac@wcsu.edu

<http://sites.wcsu.edu/roccac>

