## CS 561, HW6

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Due: Nov 30th

- 1. Prove via induction that any tree over n nodes has exactly n-1 edges.
- 2. Exercise 23.2-8 New MST algorithm
- 3. Problem 23-3 "Bottleneck Spanning Tree"
- 4. Problem 23-4 "Alternative MST Algorithms"
- 5. Prove Claim 1 from Lecture 10
- 6. Prove Claim 2 from Lecture 10
- 7. Problem 24-2 Nesting Boxes
- 8. Problem 24-3 Arbitrage
- 9. Exercise 25.2-1 "Run the Floyd-Warshall algorithm"
- 10. Problem 25-1 Transitive Closure of a Dynamic Graph