CS 561, HW7

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Due: Dec 9th

1. Exercise 26.2-3: Minimum cut for the example
2. Exercise 26.2-9: Edge Connectivity
3. Exercise 26.3-4: Hall's Theorem
4. Problem 26-3: Space Shuttle
5. Exercise 29.2-3 (SSSP as an LP)
6. Exercise 29.2-4 (Network Flow as an LP)
7. Exercise 29.2-5 (Reducing Constraints)
8. The problem INDEPENDENT-SET asks: Does there exist a set of k vertices in a graph G with no edges between them?. Show that this problem is NP-Complete. (hint: Reduce from CLIQUE)
9. Exercise 34.5-1 (Subgraph Isomorphism)
10. Exercise 34.5-2 (0-1 Integer Programming)