COMP-160, Homework 0

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- 1. What is your name? Benjamin Tanen
- 2. Are you in SoE, A&S, other? School of Engineering
- 3. Are you an undergrad, grad, postbac, other? I am an undergraduate, class of 2017
- 4. Have you taken an algorithms class before? None
- 5. Have you taken COMP-170? I am currently enrolled in COMP-170
- 6. Have you taken both prerequisites: COMP-61 and 15? Yes

Self-Evaluation Topics:

- 1. Logic: 8 (From COMP-61 and other math courses)
- 2. **Induction:** 8 (From COMP-61, COMP-105, and other math courses)
- 3. **Recursion:** 9 (From COMP-15, 61, 105)
- 4. **Big-O notation:** 7 (From COMP-15)
- 5. Random variables and expected value: 8
- 6. Heaps and heap sort: 5 (From COMP-15)
- 7. Quick sort: 6 (From COMP-15)
- 8. Merge sort: 6 (From COMP-15)
- 9. Binary trees: 8 (From COMP-15, 61)
- 10. **Hashing:** 7 (From COMP-15)
- 11. **Graph basics:** 8 (From COMP-15, 61)
- 12. Dijkstra's algorithm: 7 (From COMP-15)

Class Expectations: I am expecting to get a better understanding of the complexity associated with computational algorithms, how to calculate this, and how to write and improve algorithms for use on my own.