This is an in-class quiz. Notes and calculators are not permitted. Answer all questions on both the front AND the back of this quiz page.

1. True or False [50, 5 points each]. Circle either T or F in answer to each question.

   T or F  Mark Andreessen believes that we are in the middle of a dramatic and broad technological and economic shift in which software companies are poised to take over large swathes of the economy.

   T or F  A computer must contain electronics.

   T or F  *Sorting* refers to the job of a hat in a story about a kid who goes to boarding school for magic, but has little to do with computing.

   T or F  The "genius programmer" who works alone and produces amazing software is a myth.

   T or F  Today's engineer should focus solely on problem solving and should avoid learning about communication and story telling.

   T or F  The power of parallel computing comes from the extra speed gained by immersing circuits in fluid and organizing them in parallel lines.

   T or F  Overstating your GPA by a few points is a great way to get an opportunity to talk to a potential employer.

   T or F  Scale, or "how to manage complexity", used to be a central intellectual challenge of computing but has been solved for a long time.

   T or F  Many software companies are converging with media companies and are rapidly assuming traditional mass media goals.

   T or F  The interactive user interface is another example of how the digital image is at the center of the transformation of mass media.
2. Multiple Choice [50, 5 points each] Circle your answer.

- Which decimal value below is the correct equivalent of 0x32 ("32" hexadecimal)?
  1. 32
  2. 48
  3. **50**
  4. 64

- Which is NOT a reason why Computing Science is a great major, as presented in class?
  1. Long history
  2. Intellectual challenge
  3. Constant change
  4. Interdisciplinary

- "In a hierarchy, every employee tends to rise to his level of incompetence." This is a statement of
  1. Moore’s law
  2. The Simplicity Theory
  3. **The Peter Principle**
  4. The Mean Value Theorem

- The "Teem Geek" book identifies three pillars for teamwork, abbreviated HRT. What does that stand for?
  1. Humility, Respect, Transformation
  2. **Humility, Respect, Trust**
  3. Honesty, Respect, Trust
  4. Honesty, Respect, Transformation

- Remembering that the ASCII value for "A" (capital 'A') is 65 (decimal), what is the ASCII value for "T" (capital 'T')?
  1. 81
  2. 82
  3. 83
  4. **84**

- What is NOT one of the three basic areas of computer science?
  1. Graphics
  2. Foundations / theory
  3. Systems design / engineering
  4. Applications

- "Lose the ego" and "be a catalyst" are examples of leadership__________?
  1. Antipatterns
  2. Patterns
  3. Goals
  4. Tips and tricks

- What is 2 raised to the 8th power, written as a binary number?
  1. 11111111
  2. 01000000
  3. **10000000**
  4. 10000000

- The UPS "Worldport" is in what city?
  1. Lexington, KY
  2. New York City
  3. **Louisville, KY**
  4. Phoenix

- The power of the Unix Model – which is also a "big idea in CS" - is to use
  1. Hierarchical abstraction
  2. **Compositionality**
  3. Sorting
  4. Peano's axioms