

CS 210: Assignment Three  
Due: Monday, May 15<sup>th</sup> 2006 in class

Part One:

Based on the course readings and discussions, explain the meaning of the following quote by Daniel Hillis: " A computer is not dependent so much on technology as on ideas". Be as comprehensive as possible.

Part Two:

Using the readings and class notes, describe the operation of the Turing Machine and then explain its significance in the development of modern computing. Be as creative as possible. You may wish to consider how Turing's method changed thinking about the potential tasks of computing. You may also wish to consider the limitations of the Turing machine and how this has affected our expectations and assumptions about the capacities and potential of digital computers.

Recommended length: 6 to 7 double-spaced pages.

#### Guidelines

- Fully explain your answers
- **Reference the readings and discussion notes**
- Feel free to use any outside resource, including those listed on the course Web site.
- Be clear in your writing. Try to write your essay as if it will be read by a non-specialist who is not familiar with the course material.
- Be prepared to write one or more drafts before submitting the paper.
- Feel free to ask any questions or bring in a draft for review.
- Please retain a copy of your answers.
- Emails will not be accepted.
- Answers must be typed. Check your printer "ribbon" or cartridge before printing.
- Use a stapler

#### Quiz Evaluation and Recommendations:

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|---------------------------------|-------|--|
| 40% Use of Course Material      | ----- | Remember to refer to readings & notes  |
| 40% Comprehensiveness & Clarity | ----- | Cover the entire topic which the question <u>reasonably</u> suggests, including strengths and weaknesses, criticisms, examples, hypotheticals and exceptions.                          |
| 20% Creativity & Originality    | ----- | Give your opinion and reflections on the issues (after fulfilling the above-listed requirements). Suggest possible additional perspectives, based on your own experiences or readings. |