This writing assignment deals with two reading assignments from the Pattern on The Stone by Daniel Hillis.

- pp. 39 – 50
- pp. 77 – 83

Using the information from these two readings, answer the following questions:

1) Define in your own words what an extensible computer language is. Why is having an extensible language useful in writing computer programs? Give an example of something not related to programming languages that is like an extensible language.

2) Describe how algorithms act as a layer of abstraction. How are the performances of different algorithms compared to one another? Why is it important to have algorithms that have fast run time?

3) Why do you think Hillis states that finding a fast solution to the traveling salesman problem would be the “Holy Grail” of Computer Science? Why is there still hope that a fast (polynomial) solution exists for the traveling salesman problem?

4) Do an Internet search for “P = NP”. Without getting bogged down in the mathematical details, describe the general nature of this problem. How does this problem relate to the traveling salesman problem from question 3? Do you think computer scientists will ever find a solution to this problem? Be sure to cite any sources that you use.

5) To hand this assignment in, you will post it as a blog entry to your CSC101 Journal. The page we will be using for our journal from now on is entries.html, in your CSC101 folder. Consult your past lab reports, or the information found at w3schools if you are unsure of how to do this. Add a horizontal line between your last entry and this one, and also include the date the assignment is due under the horizontal line. Use any of the formatting tags that you know (or even some new ones) to make your entry look good.
   a. Here are some tips to help you out:
      i. Edit the file entries.html found in your userdata/csc101 folder
      ii. You can use Dreamweaver to add your entry to your page, as well as format the style of the entry.
      iii. To upload your page to the web, use the “put” function in Dreamweaver. (Highlight entries.html, and click the blue up arrow)

6) I will check the following link to see if your entry exists:
   a. http://www.wfu.edu/~user/csc101
   b. Be sure to check this link to make sure your assignment appears online.
   c. If it does not appear, follow the instructions from lab to update the permissions of your website.