Sub Day Activity

Today, while I am out we are going to take a tech field trip to one of the best technical colleges in the world. We have the pleasure of listening to Professor Eric Grimson of the Massachusetts Institute of Technology (MIT) as he gives the opening lecture of his Introduction to Computer Science and Programming class. This is an opportunity students pay thousands of dollars for, and it is going to be yours for free.

Your Assignment is to watch the Youtube video titled *Lec 1 | MIT 6.00 Introduction to Computer Science and Programming, Fall 2008* and answer the questions below. A link to the video can be found on our class webpage.

1) What is computational problem solving?

2) What is declarative knowledge?

3) Provide an example of a declarative statement.

4) What is imperative knowledge?

5) What is a fixed program computer?

6) Professor Eric Grimson describes the interpreter as being the basic heart of every computer. What does the interpreter do?

7) What two components make up a stored unit computer?

8) What does our Arithmetic Logic Unit (ALU) do?

9) Where do we find our sequence of instructions?

10) What do we need to, as Professor Eric Grimson says, “describe our recipes”, or in other words, write our programs?

11) Which language does Professor Eric Grimson think is best?

12) What are the two levels of language?

13) What is “syntax”?

14) What are “static semantics”?

15) What are “semantics”?

16) What similarities can you draw between Java and Python?

17) What similarities can you draw between Java and Python?