AP Computer Science Principles

Summer Assignment 2022

Read Blown to Bits, Chapter 1, and answer the following questions.

The link to the freely downloaded book is

http://www.bitsbook.com/wp-content/uploads/2008/12/chapter1.pdf

1. What is a *bit* and what does it mean to say that "it's all just bits"? (Koan 1) Give three examples of the things today that are stored as bits.

2. Describe Moore's Law in your own words.

3. Someone offers you a summer job and offers you two pay rates: (1) $10 per hour for 40 hours per week for 4 weeks or (2) One cent on day 1, two cents on day 2, four cents on day 3 and so on (doubling each day) for 30 days. If you were trying to make as much money as possible in 30 days, which pay rate would you choose? What does this illustrate?

4. What are the authors referring to when they state *“nothing goes away”?* (Koan 6). List two reasons why this could be helpful and two reasons why this could be detrimental.

5. The digital explosion is "neither good nor bad" but has both positive and negative implications. Give two positive and two negative implications.