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Computer Basics Course

Essay 24 – CBC Video 2

1. Why is asynchronous useful?
   * Asynchronous or “Async” is useful because it sends data in discrete packets and allows the computer to make intelligent decisions about how to send each packet of data.
2. What is an array and how is it useful?
   * An array is set of data that is organized with each piece of data having an index that is specific to it. Arrays are useful because they allow you to access a piece of data based on its index without any ambiguity. This lets you modify or transfer only the data that is useful to you.
3. What are some of the ways one can connect to the internet?
   * Dial-Up
     + Dial-Up is using phone lines to transfer data over the internet.
   * DSL
     + DSL stands for Digital Subscriber Line and, like dial-up, it use the phones lines to transfer data, but it is much faster because it can transfer multiple pieces of data at once.
   * Broadband
     + Broadband internet is general term that is used for internet that allows for very fast transfer speeds. It uses television cables to transfer data or satellites to transfer data.
   * Fiber Optics
     + Fiber Optics refers to a specialized wires made of flexible glass that allows data transfer at the speed of light. This is fastest way to connect to the internet, however unlike the other forms of connecting to the internet the infrastructure for fiber optic connections I brand new and not in place in most towns.
4. What did you learn from watching the “Computer Basics Course Video 1” and “Computer Basics Course Video 2”?
   * “Computer Basics Course Video 1”
     + The “Computer Basics Course Video 1” reviewed many of the concepts in the Computer Basics Course. Learning how a computer sends data and does tasks digitally was very interesting. The computer does billions of task a second but only one task at a time. This makes it appear that the data is being transferred as analog data because it happens so fast. Also, the simple description of the make-up of a transistor helped me visualize how the computer can detect whether something on or off, or 1 or 0.
   * “Computer Basics Course Video 2”
     + The “Computer Basics Course Video 2” was an overview of how data transfer works and the different kinds of ways one can connect and transfer data over the internet. Review the different parts that make up a network was helpful in understand just how a network is setup. The video talked about routers, modems and different kinds of networks but focused mainly on how a LAN or local area network is setup. Computers that are the same LAN can access each other’s data much faster. This video also taught me that asynchronous data transfer is smarter way for a computer to handle data because it can take each packet of discrete data decide exactly how to handle it. Another interesting fact that I learn was about how fiber optics; although it’s the fastest way to connect to the internet it uses brand new infrastructure and therefore isn’t available everywhere.