Taller de Lectocomprensión y Traducción en Inglés PRACTICA EXTRA - A

1. BUS TRANSACTIONS

A bus transaction includes two parts: sending the address and receiving or sending the data. Bus transactions are typically defined by what **they** do to memory. A *read* transaction transfers data *from* memory (to either the processor or an I/O device), and a *write* transaction writes data *to* the memory. Clearly, this terminology is confusing. To avoid this, we will try to use the terms *input* and *output*, **which** are always defined from the perspective of the processor: an input operation is inputting data from the device to memory, where the processor can read **it**, and an output operation is outputting data to a device from memory where the processor wrote it.

Buses are traditionally classified as processor-memory buses and I/O buses. Processor-memory buses are short, generally high speed, and matched to the memory system so as to maximize memory-processor bandwidth.

A. Lea el texto con atención e indique a qué refieren las palabras en negrita.

- 1. they:
- 2. which:
- 3. it:

B. Traduzca las siguientes frases nominales:

- 1. A read transaction:
- 2. the perspective of the processor:
- 3. processor-memory buses:

C. Responda en castellano.

- 1. ¿Qué transacciones de bus se definen en el texto? Explique.
- 2. ¿De qué forma se definen normalmente la entrada y la salida? ¿Qué sucede en la operación de salida?

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2. EVOLUTION OF PROGRAMMING LANGUAGES

A *programming language* is a systematic notation by which we describe computational processes to others. By a computational process I mean nothing more than a set of steps **which** a machine can perform for solving a task. To describe the solution of a problem to a computer, we need to know a set of commands that the computer can understand and execute.

When a computer comes off the assembly line, it will usually be able to do only arithmetic and logical operations, input and output, and some "control" functions. These capabilities constitute the *machine language* of the computer. But because this language is so far away from the way people think and want to describe solutions to problems, the so-called *high-level programming languages* have been conceived. **These languages** use less primitive notations than machine language, and hence, **they** require a program which will interpret their meaning to the computer.

A. Lea el texto con atención e indique a qué refieren las palabras en negrita.

- 1. which:
- 2. These languages:
- 3. they:

B. Traduzca las siguientes frases nominales:

- 1. a systematic notation:
- 2. a set of commands:
- 3. their meaning:

C. Responda en castellano.

- 1. ¿Cómo define el autor al proceso computacional?
- 2. ¿Cuáles son las capacidades que componen el lenguaje de máquina?

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3. Flash memory

Flash memory is non-volatile computer memory that can be electrically erased and reprogrammed. Non-volatile means that it does not need power to maintain the information stored in the chip. In addition, flash memory offers fast read access times and better kinetic shock resistance than hard disks. It is a technology primarily used in memory cards, USB flash drives, which are used for general storage and transfer of data between computers and other digital products. Unlike EEPROM (Electrically Erasable Programmable Read-Only Memory), it is erased and programmed in blocks consisting of multiple locations (in early flash the entire chip had to be erased at once) Therefore, it has become the dominant technology wherever a significant amount of non-volatile, solid-state storage is needed. Examples of applications include PDAs (Personal Digital Assistant) and laptop computers, digital audio players, digital cameras and mobile phones.

History: Flash memory was invented by Dr. Masuoka while working for Toshiba in 1984.

A. Traduzca las siguientes frases nominales.

- 1. fast read access times:
- 2. kinetic shock resistance:
- 3. a significant amount of non-volatile, solid-state storage:

B. Responda en castellano.

- 1. ¿En qué se parecen y en qué se diferencian la memoria flash y la EEPROM?
- 2. ¿Por qué decimos que la memoria flash es no volátil? Proporcione ejemplos del uso de este tipo de memoria.

C. Traduzca el siguiente texto. (continuation)

According to Toshiba, the name "flash" was suggested by his colleague, because the erasure process of the memory contents reminded him of a camera flash. Dr. Masuoka presented the invention at the 1984 International Electron Devices Meeting (IEDM) held in San Francisco. Intel saw the potential of the invention and introduced the first commercial NOR type flash chip in 1988.

Glossary: NOR type: tipo NOR

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4. Early monitors

During the earliest days of office computer usage, punch cards and paper tape were the standard issue for reading and writing information. At that point, these readouts were the only methods for one computer to transfer data to another computer.

Punch cards were simply a stack of index cards into which a punch card writer put small holes. From there, a punch card reader would interpret information presented based on the location of these holes. By contrast, a paper tape writer and reader used a long roll of paper that could be perforated in a similar fashion and read the same way, rather like a simplified version of the magnetic tape in a cassette.

Once the information was interpreted, the computer would print out letters and numbers based on the information. While this was not a monitor in the modern sense, it was the precursor to the monitors people use today.

A. Traduzca las siguientes frases nominales:

- 1. the only methods for one computer:
- 2. a punch card reader:
- 3. a simplified version of the magnetic tape in a cassette:

B. Responda en castellano.

- 1. ¿Cómo se lograba la transferencia de datos entre las primeras computadoras?
- 2. Explique en qué consistían la "escritura" y la "lectura" de información.

C. Traduzca el siguiente texto.

Monitors That Show Characters

The CRT or cathode ray tube monitors that made television a reality also made the earliest modern style computer monitors possible. Generally, these monitors made use of vector graphics which plotted points on the screen. The military put this to work in radar and sonar applications, and scientists used these early monitors in oscilloscopes. Color was not an option at this stage.

Glossary: Sonar: sonar (sistema que se usa para detectar y ubicar objetos bajo el agua).

Oscilloscope: osciloscopio (instrumento que usa un tubo de rayo catódico para mostrar cambios periódicos en pantalla).