**VOCABULARY #1**

**Active matrices (matriz activa):** is a type of addressing scheme used in flat panel displays.

**Alternating currents (Corriente alterna):** voltage or current that changes polarity or direction, respectively, over time.

**Amperes :** unity of intensity of electrical current.

**Antenna (Antena):** device that receives and produces electromagnetic waves to send or receive information.

**Apple:** American enterprise founded by Steve Jobs, Steve Wozniak and Ronald Wayne, that design, manufactures software and service online. It’s one of the biggest companies on Earth. Mostly known to have introduced the smartphone revolution.

**Bachelors degree (Título de licenciatura):** title or honorary that is given to someone who finishes superior education, meaning, university.

**Bays (Bahía):** is an open computer section used for expansion add-ons to your computer, such as a hard drive and CD-ROM drive.

**Bitmap (Mapa de bits):** is a mapping from some domain.

**Broadband (Banda ancha):**  is wide bandwidth data transmission which transports multiple signals and traffic types.

**Buttons (Botones):** component in a mouse where the user triggers the click event.

**Calculus (Cálculo):** branch of mathematics which helps us understand changes between values that are related by a function.

**Capacity (Capacidad):** property in which a component can store data within it.

**Case (Cubierta):** a protector to the computer components.

**CAT-5 cables (Cables CAT-5):**  is a twisted pair cable for computer networks.

**CD/DVD drives (Unidad de disco compacto digital)**: device that reads the encoded information inside the CDs format.

**CDs (Disco compacto):** a molded plastic disc containing digital data that is scanned by a laser beam for the reproduction of recorded sound and other information.

**Celsius:** unit of measuring temperature. It’s reference point is when the water starts to boil and when the water freezes.

**Centimeters (Centímetros):** unit of measuring distance. Equivalent to 0.01 meters.

**Chemical energy (Energía química):** energy produced by chemical reactions.

**Click (Tocar):** action triggered by the mouse from the user that means to have pointed and selected an element.

**Component (Component):** term to refer to a piece of a structure of something.

**Computer architecture (Arquitectura de computadora):** structure of a computer that is in way compound. It defines how it works along with some elements. Common architecture is the Von Neumann.

**Computer cluster (Grupo de computadoras):** arrays of servers by a network of high velocity and behaves like one server.

**Computer Enginner (Ingeniero informático)**: engineers that use their extensive knowledge of hardware and software design and computer programming to make computing platforms and applications more efficient and effective.

**Computer science (Ciencias de la computación):** is the study of computers and computational systems. Deal more with software and software systems.

**Computers/PCs (Computadoras personales):** devices that are used in many applications, mostly on gathering data through a software and analyzing it to solve a problem.

**Conduct (Conducir):** organize or perform a particular task.

**Conductors(Conductores):** materials that are easily to conduct electricity, heat or generally, energy.

**Conservation of energy (law) (Ley de conservación de la energía):** law that states that energy can’t be created, destroyed but transformed.

**Convert (Convertir):** change from one state to other.

**CRTs (Tubo de rayo catódicos):** is a vacuum tube that contains one or more electron guns and a phosphorescent screen and is used to display images.

**Currents (Corriente):** is the amount of flow of electrical charge that is flowing in a material.

**Customize (Personalizable):** to change something to be adaptable to your needs.

**Decimal (Decimal):** representation of numbers that are smaller than or between unities.

**Degrees (Grados):** symbol that represent degrees of arcs. In unit, is a temperature unit.

**Denominator (Denominador):** bottom part of a fraction that represents the total quantity.

**Design (Diseñar):** to structure something, in this case, a software.

**Desktops (Computadora de escritorio):** computers that can be visually separated by components. Used for more demandant wok.

**Develop (Desarrollar):** work on a system by a determined design.

**Direct currents (Corriente directa):** voltage or current that doesn’t change polarity or direction, it stays static.

**Display (Desplegar):** term to generalize devices that can display a visual perception of information.

**DVDs (Disco digital versátil):** is a digital optical disc storage format.

**Electrical energy (Energía eléctrica):** energy in the form of electrical current, which is in cause by electrons in flow.

**Electrical engineering (Ingeniería eléctrica):** branch of engineering that deals with the technology of electricity.

**Electrical power (Energía eléctrica):** rate, per unit time, at which electrical energy is transferred by an electric circuit.

**Electricity (Electricidad):** close circuit of flow of electrons in a conductor.

**Electromechanical mouse (Ratón electromecánico):** a mouse similarly to a optical mouse, but uses a electromechanical sensor.

**Electrons (Electrones):** particles that have a negative charge.

**Embedded Computers (Ordenadores integrados):** computers with limited functionalities that are determined by their use.

**Energy (Energía):** capacity of doing work.

**Equal (Igual):** logical statement that enhances the left side and right side to be the same value.

**Evaluate (Evaluar):** to test a software and its functionality.

**Fahrenheit:** unit of measurement of temperature which like Celsius, uses the point of water boiling and freezing to measure.

**Fan (Abanico):** device that dissipates heat by rotating blades.

**Flash drives (Unidades flash):** is a data storage device that includes flash memory with an integrated USB interface.

**Flash memory (Memoria flash):** is a non-volatile memory chip used for storage and for transfering data between a personal computer (PC) and digital devices.

**Flat-panel (Panel plano):** re a class of solid-state x-ray digital radiography devices similar in principle to the image sensors used in digital photography and video.

**Floppy disks (Disquetes):** is a type of disk storage composed of a disk of thin and flexible magnetic storage medium, sealed in a rectangular plastic enclosure lined with fabric that removes dust particles.

**Foundation (Fundación):** start of main building blocks of something.

**Fractions (Fracciones):** representation of the division operation.

**Frame Buffer (Búfer de trama):** is a portion of random-access memory (RAM) containing a bitmap that drives a video display.

**Friction (Fricción):** is the resistance to motion of one object moving relative to another.

**Grams (Gramos):** unit of measurement of weight. Equivalent to 0.001 kilograms.

**GUIs (Interfaz de usuario gráfica):** graphic user interface in which the user interacts with.

**Hard drives (Disco duro):** is an electro-mechanical data storage device that uses magnetic storage to store and retrieve digital data using one or more rigid rapidly rotating platters coated with magnetic material.

**Hardware design (Diseño de hardware):** process in which engineers conceptualize hardware structure and components.

**Hardware:** physical components of a computer.

**HD (Alta definición):** term referred to a display of high definition, means, more pixels, on a image in a monitor.

**Heat energy (Energía en calor):** energy in the form of heat, temperature.

**Heat sink (Disipador de calor):** is a component that increases the heat flow away from a hot device. This is made by having a heat conductor.

**Inch (Pulgadas):** unit of measurement of distance. Equivalent to 25.4 millimeters.

**Internet:**  is a global network of billions of computers and other electronic devices.

**Investigate (Investigar):** to research or gather information.

**Kilogram (Kilogramos):** unit of measurement of weight. Equivalent to 1000 grams.

**Kinetic Energy (Energía kinética):** energy in the form of movement.

**LAN (Red de área local):** named as local area network. A network composed by a local regional geographic site located computers.

**Laptops (Computadoras portátiles plegables):** computers that are integrated with a system, lightweight, and can be carried from one place to another.

**LCDs (Pantalla de cristal líquido):** is a flat-panel display or other electronically modulated optical device that uses the light-modulating properties of liquid crystals combined with polarizers.

**LEDs (Diodo emisor de luz):** is a semiconductor light source that emits light when current flows through it.

**Linux:** operating system created by Linus Torvalds. It’s known to be the most used operating system for servers. Also known to be the most secure operating system, the most customizable and the most preferred by programmers.

**Magnetic tape (Cinta magnética):** is a system for storing digital information on magnetic tape using digital recording.

**Mathematical analysis (Análisis matemático):** is the analysis of numbers, their uses and concepts through applications.

**Mathematics (Matemáticas):** the science of structure, order, and relation that has evolved from counting, measuring, and describing the shapes of objects.

**Microsoft:** American enterprise founded by Bill Gates and Paul Allen. Their main business or operation focus relies on the software for enterprises, education and building operating systems. It’s known for designing the most used operating system for personal computers.

**Minus/Substract (Reducir):** mathematical operation that reduces values between other values.

**Monitor:** output device in which outputs image.

**Motherboard (Placa madre):** the main component of a CPU that distributes the workflow of any computer operation.

**Negative charge (Carga negativa):** state in which a conductor has more negative charges (electrons) than positive charge (protons).

**Network (Red):** concept that enhances more than one computer to have information flow between them.

**Notebooks (Computadoras portátiles plegables):** like laptops, just more lighter.

**Numbers (Números):** representation of quantity.

**Numerator (Numerador):** upper side of a fraction in which indicates the amount selected.

**Ohms:** unit of measurement of electrical resistance.

**Open source (Código abierto):** characteristic of software written in public so that anyone can use and change.

**Operating system (Sistema operativo):** computer core software that enhances communication between the hardware and upper core software or operations made inside it.

**Optical mouse (Ratón óptico):** mouse that records the movement of the device by optical cameras.

**OS X:** the operating system designed and coded by Apple. With a minimalist design and very efficient use of their components.

**Ounce (Onza):** unit of measurement of weight. Equivalent to 0.0353 grams.

**Out of (De):** way to say a fraction representation.

**Over (division) (Sobre):** mathematical operation that calculates the result by substracting certain number by certain times.

**Percent (por ciento):** symbol that represent a number or ratio expressed as a fraction of 100.

**Percentage (Porcentaje):** number of ratio of a fraction of 100.

**Physics (Físicas):** is the study of the basic principles that govern the physical world around us.

**Pixels (Píxeles):** a point, in which displays a certain color by a little led.

**Plus/Add (Añadir):** mathematical operation that sums values.

**Point (Punto):** dot, in a particular location.

**Pointers (Punteros):** is a programming language object that stores a memory address.

**Polarity (Polaridad):** is a separation of electric charge leading to a molecule or its chemical groups having an electric dipole moment

**Port (Puerto):** is an endpoint in which other cables or devices are connected to ensure communication between both parties.

**Positive charge (Carga positiva):** state in which a conductor has more positive charges (protons) than negative charge (electrons).

**Potential energy (Energía potencial):** energy held by an object caused by its position relative to other objects, electrical charge, or stresses within itself.

**Pound (Libras):** unity of measurement of weight. Equivalent 2.2 pounds equals 1 kilogram.

**Power supply (Fuente de poder):** device that distributes electrical flow at different voltages to different components at the motherboard.

**Processors (Procesador):** main logical component on the motherboard that executes logical, mathematical, and memory operations inside the motherboard.

**Programming (Programación):** discipline that studies the design and codification of algorithms in computational systems.

**QWERTY keyboard (Teclado QWERTY):** the standard convention for characters positions in keypads.

**Reduce (Reducir):** to decrease something.

**Releases (Desprender):** to expulse something.

**Resistance (Resistencia):** property of a conductor in which reduces the amount of something flowing in it.

**Router (Enrutador):** device that is in charge to decode and encode signal to the network.

**Screens (Pantallas):** device that outputs image from the computer.

**Scroll (Desplazar):** action triggered by the mouse from the user that means to move the page down.

**Scroll wheel (Rueda de desplazamiento):** component in a mouse similarly like a donut, which the user triggers the scroll event.

**Servers (Servidores):** arrays of computers that are integrated onto a network (local or international) in which processes information or do requests for responses on different behavior the user needs.

**Signal processing (Procesamiento de señal):** process in which a device gets a signal from electromagnetic waves and converts it to legible data.

**Signals (Señales):** property of propagation of waves through the air.

**Software compatibility (Compatibilidad de software):** ability of a software code to be executed on a determined operating system.

**Software:** part of the computer that analyses, solves and gathers data. It’s not physical.

**Storage (Alamacenamiento):** amount of data that the component can store.

**Tablet (Computadora por toque mediante tabla):** integrated computer with a different interface that most PCs, with a interactive touchscreen. Movable and lightweight.

**Times (multiplication) (Veces):** mathematical operation that calculates the result by add certain number by certain times.

**Transfer (Transferir):** process in which a material passes energy to another.

**Voltage (Voltaje):** amount of electrical difference between two points.

**Volts:** unit of measurement of voltage.

**Watts:** unit of power in which energy is produced or consumed.

**Windows:** operating system created by Microsoft. The most used operating system on personal computers.

**Wireless (Inalámbrico):** something that doesn’t need wires to have communication or information flow.

**WLAN (Red de área local inalámbrica):** local network that use radio frequency to transmit and receive data over the air, minimizing the need for wired connections.

**Work (Trabajo):** force causing movement or displacement of an object.

**Workstations (Estaciones de trabajo):** computers that are suitable for people that their work usage is very high and demandant.

**Zip drives (Unidades zip):** are portable storage devices that allow you to save your files and bring them with you wherever you need to go.