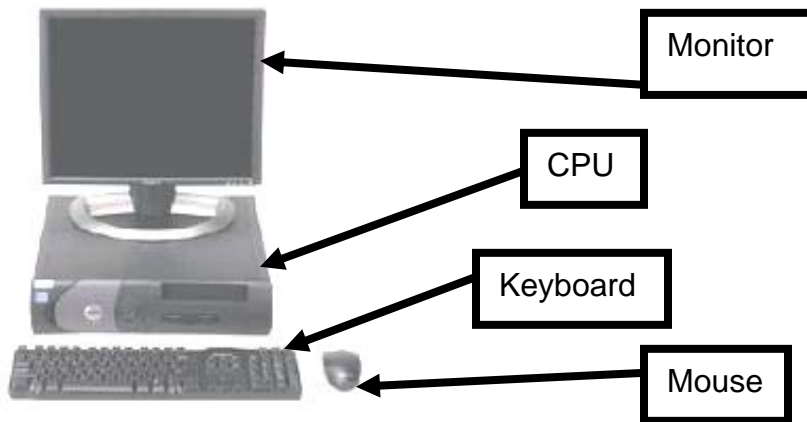

Parts of a Computer

Hardware

Hardware is a term for computer equipment.



The Monitor

The monitor displays the content and the operations of the computer.



The Mouse

The mouse is an input device that lets you communicate with the computer.



The CPU

The CPU (Central Processing Unit) is where the internal components of the computer are stored.



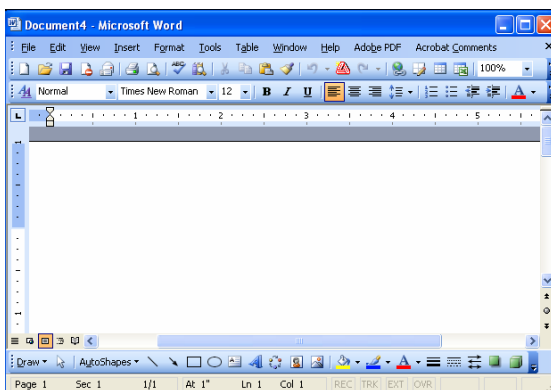
The Keyboard

The keyboard is another input device that lets you communicate with the computer.



Software

Software is the programs that run on the computer. Examples include Microsoft Word and Internet Explorer.



Storage

Storage devices allow you to save your files and take the information from computer to computer.

Floppy disk

Cheap and portable, a floppy disk is a convenient way to save smaller files. Holds 1.44 MB.



CD Rom

A compact disk will hold several large files. Holds 700 MB.



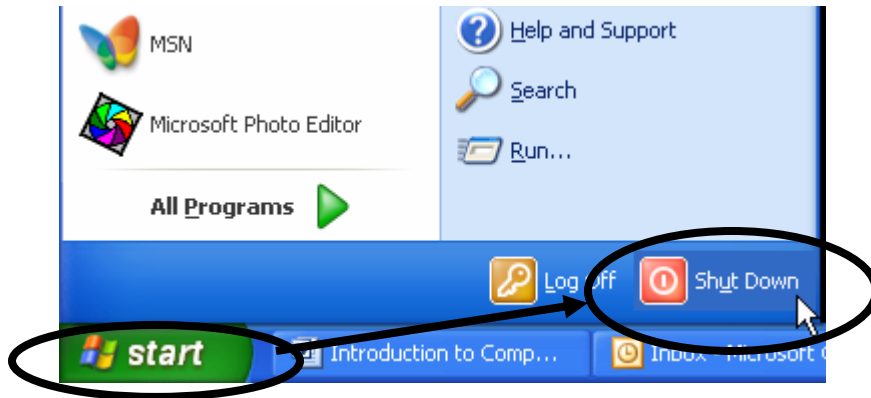
Thumb drive

A thumb drive, jump drive, or USB drive will hold a large amount of data and is easily portable. Holds 128 MB – 2 GB. (1 GB = 1024 MB.)



Shutting down the Computer

Click Start, Shut Down

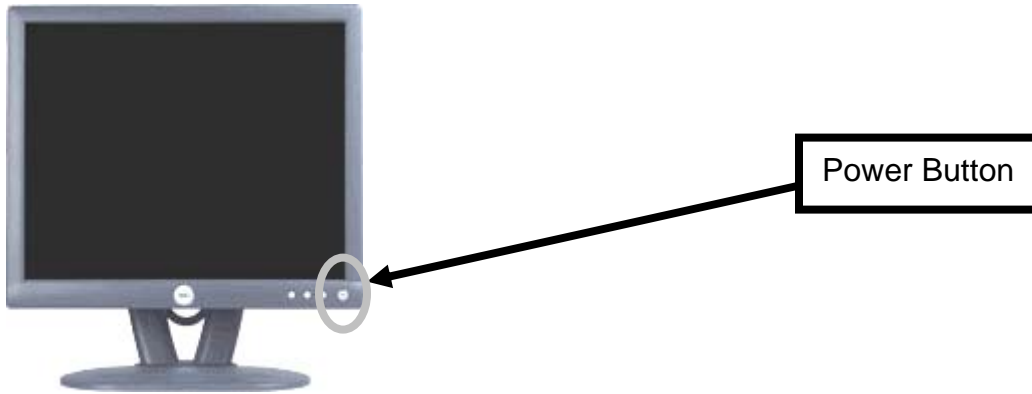


Be sure the Shut Down option is displayed, then Click OK.



Starting the computer (Booting up the computer)

Turn on the monitor. The power button for the monitor is usually in the bottom right corner.



It will take a couple minutes for the computer to start and load the programs. Depending on how your computer is set-up you may or may not have to log in with a user name and password.

Turn the computer on by pressing the power button. The power button is located on the front of the CPU.



Microsoft Windows

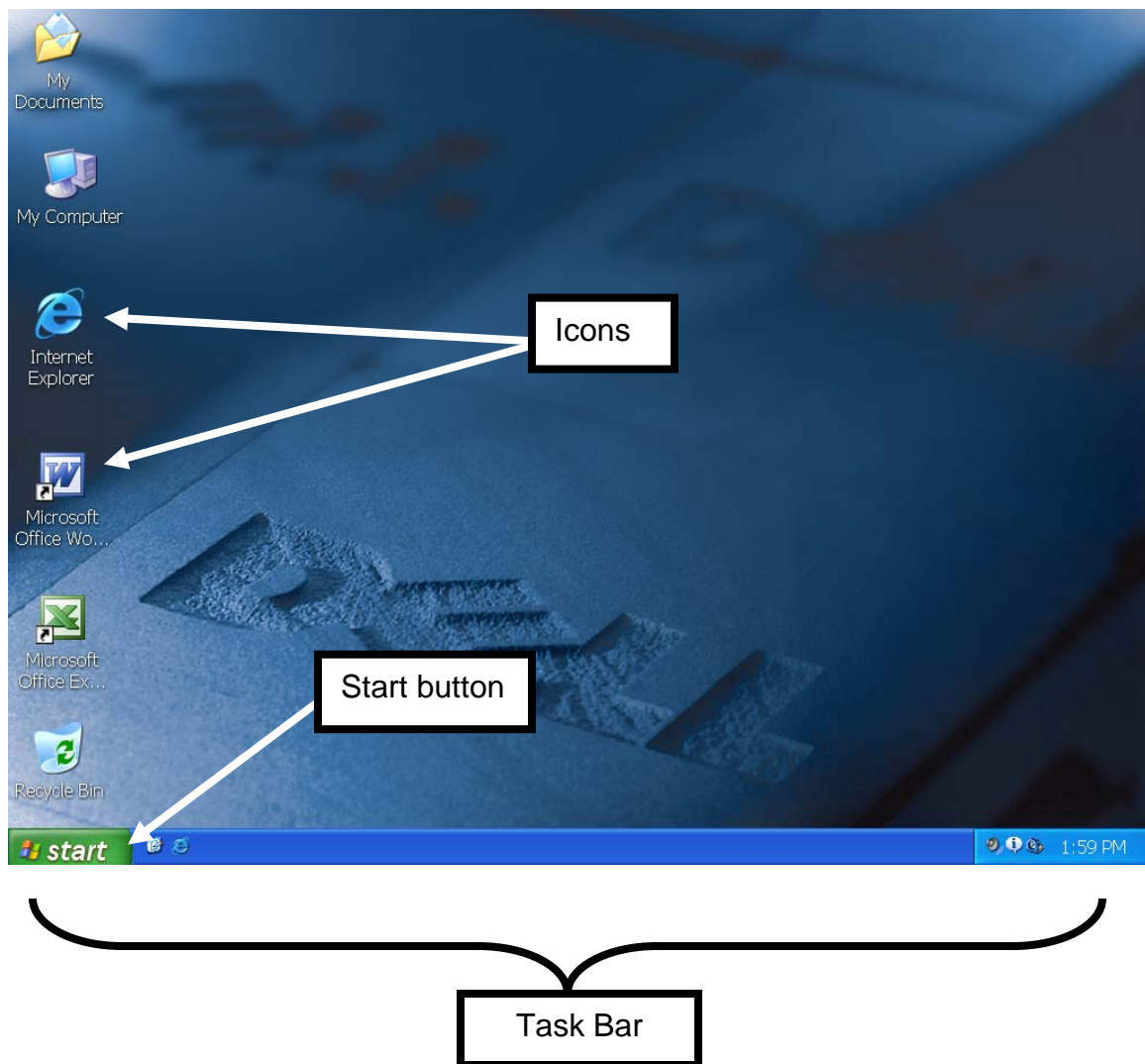
Microsoft makes the Windows operating system used in many computers. There are several versions of Windows currently in use including Windows 95, Windows 98, and Windows XP. The operating system is a set of instructions that tells your computer how to run and how to manage the different programs that you install.

Desktop

The desktop is your work surface. It is the screen you see once your computer has finished booting up and you are ready to get started.

The small pictures are shortcuts to programs called icons. Double-click icons to start a program. Clicking the Start button also shows a list of programs and other options on the computer.

The blue bar across the bottom of the screen is the Task Bar. Here you can see the clock in the far right, and also what programs are open on your computer.



Opening a program

Double click the icon on the desktop for the program you want to open.



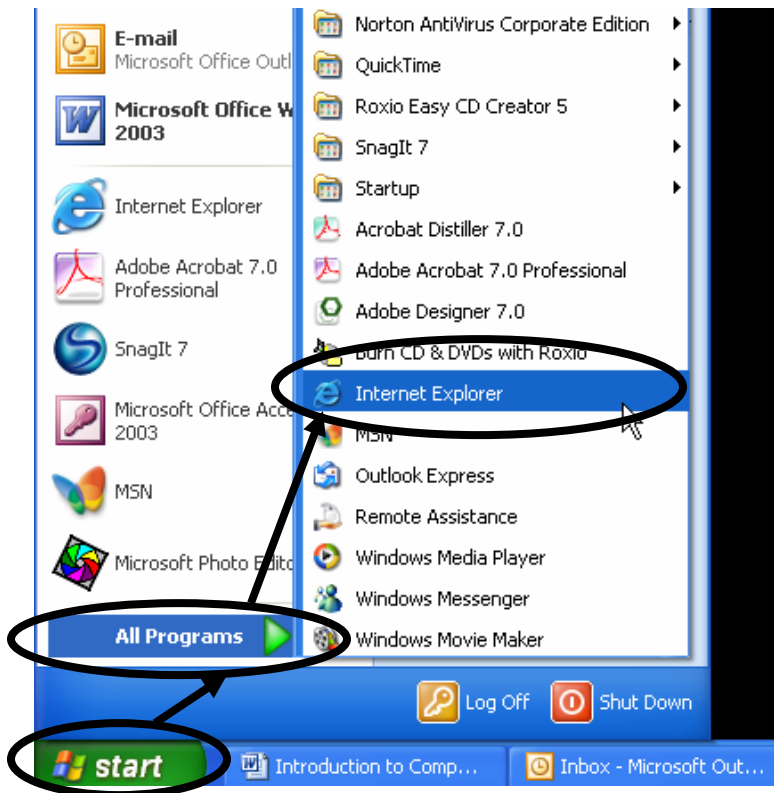
OR

Click once on the icon for the program you want to open, then hit Enter on the keyboard.



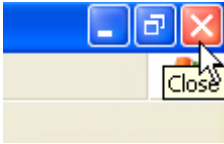
OR

Click Start, All Programs, and click the name of the program you want to open.



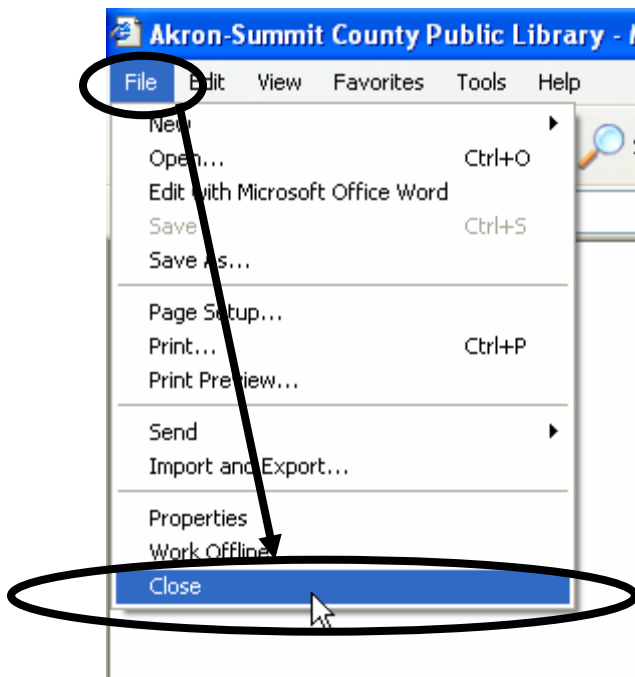
Closing a program

Click the red X in the upper right corner of the window to close most programs.



OR

You can close a program by clicking File, Close.



Troubleshooting FAQ

Can I leave my computer on all the time?

Generally yes. If you use your computer frequently throughout the day then you will want to keep it on. You may want to at least turn your monitor off to prevent screen burn. However if you are on your computer for a hour or two per day then to save power and keep your machine cool you should turn it off when you are finished.

What should I do when everything freezes and the mouse and the keyboard don't work?

First, make sure the mouse and keyboard did not come unplugged from the back of the computer. If that is not the problem, try pressing the ESC key in the upper left corner of the keyboard. You can also press CTRL+ALT+DELETE to open the Task Manager and close any programs not responding. If nothing seems to help then you will have to re-start your computer (and you may lose whatever you were working on).

The computer is on, but the screen is blank.

Check to be sure the monitor is turned on, plugged in, and connected to the computer. If the computer has not been in use for several minutes a screen saver may have started. Jiggle the mouse or press the space bar to stop the screensaver.

Suddenly while I was typing EVERYTHING CAME OUT IN CAPITAL LETTERS.

You probably pressed the Caps Lock key on the keyboard by mistake. Press it again to turn off the caps lock.

Suddenly while I was typing the words I am typing are replacing other words.

You probably pressed the Insert key by mistake. Press it again to turn off Insert and stop typing over existing text.

Safety Tips

Use a surge protector

Plug all your computer components into a surge protector. Then plug the surge protector into the wall outlet. The surge protector will protect your computer against power surges that can short out the system.



Do not unplug any components until the computer is turned off and unplugged.

This includes turning off and unplugging your surge protector. This is to prevent electric shock.

Read the manual.

The manufacturer's manual that came with the computer explains how to safely remove the case and handle the computer's components.

Housekeeping Tips

Don't touch the screen.

The oils from your fingers will leave fingerprints that are hard to remove. Avoid touching the screen if you can. To clean a CRT screen, spray some glass cleaner, or a mixture of 50% water and 50% rubbing alcohol, on a lint-free rag, then wipe the screen. Don't spray anything directly on the screen. To clean an LCD screen use LCD cleaner or cleaning cloths sold at most computer and electronics stores.

Keep drinks and food away from the computer.

This is tough, but one cup of coffee or can of pop can ruin your keyboard. Also crumbs can be a problem. To clean a keyboard, use compressed air, or a small clean paint brush to brush out lint and other debris.

Keep magnets away from your hard drive.

This isn't housekeeping, but a magnet can ruin your hard drive, so don't put any around the computer.

Computer Safety Tips

What is a computer virus?

A computer virus is a program that was written to intentionally harm your computer. Viruses are spread through email or other infected files, sometimes even from just visiting a web page.

How to prevent a computer virus

There are several things you can do to protect your computer from a virus. One is install anti-virus software on your computer and keep it up to date.

Also, do not open suspicious emails that have attachments or that come from people or organizations you do not know.

Before you download files to your computer be sure you know where the file is coming from and what it is. Always scan a file for viruses before downloading.

What are Spyware and Adware?

Spyware and Adware are small files or programs that track your internet surfing and send that information back to another web site. The programs slow your machine down considerably and may make it unusable.

How to prevent Spyware and Adware

These files are sent to your computer in the form of cookies, small files stored on your hard drive. Adjust your internet browser settings so that it does not accept all cookies from all web sites. Also, be careful about downloading software, especially file sharing software, from the Internet.

Several programs exist to protect your computer from spyware and adware. *Spybot Search and Destroy* and *AdAware* are two free programs that you use to scan your computer and remove spyware and adware. These programs can be downloaded free from the Internet. You can also purchase programs to protect your machine.

Computer vocabulary

A: The letter assigned to represent the 3 1/2 floppy disk drive.

Application Another word for program. Some examples of applications are Microsoft Word, Excel, Internet Explorer, FrontPage, and Access.

Bit The smallest unit of information handled by a computer. One byte is comprised of 8 bits.

Boot To start up the computer. During this process, the computer is loading the operating system and performing a series of tests to ensure that all components are functioning properly.

Browser An application that enables you to view images, hear sounds, run videos and animations of World Wide Web pages on the Internet. The two most popular browsers are Microsoft Internet Explorer and Netscape Navigator.

Bug An error in the hardware or software of the computer. Sometimes, the computer can assist with fixing the bug. Other times, you may have to seek the assistance of a repair technician.

Byte The amount of space needed to represent a single character. One byte is comprised of 8 bits. One keyboard character equals one byte.

C: The identifier assigned to represent the hard disk drive inside of the computer.

Cache (pronounced "cash") A temporary storage area of the computer's memory where frequently accessed data is kept. Caching helps to speed up the operation of frequently performed tasks.

Carpal tunnel syndrome A form of wrist and hand injury caused by repetitive movements such as typing. Sitting properly at the computer, as well as properly positioning the keyboard and mouse can prevent it.

CD-ROM Compact Disc-Read Only Memory. A high capacity storage device capable of holding up to 650 megabytes of data (the equivalent of 500 floppy disks or 300,000 pages of text. The information stored on a CD-ROM cannot be altered or edited. A CD-ROM drive must be installed on the computer in order to use a CD-ROM.

CPU Central Processing Unit. The "brains" of the computer. An electronic device (circuit board or computer chip) comprised of millions of electronic components that carry out basic functions on your computer. You will not actually be able to see when these functions are being performed.

Click To press and release a mouse button quickly in order to make a selection or perform an action. When "click" is used as a command, it usually refers to pressing the left mouse button once.

Crash What happens when your computer unexpectedly stops or freezes while you are working on a task. The computer does not respond to any keyboard or mouse commands. A crash may be caused by any number of problems with the hardware or software, or a virus. A crash usually involves having to re-boot the computer.

Cursor A special character within an application that shows where the next character will appear when something is typed. In most cases, you will be able to identify the cursor as a vertical blinking bar.

Desktop Your “work space” area. The area visible on the monitor screen where you can place shortcut icons to applications, files, folders, and peripherals. After the computer completes its boot process, the desktop will display.

Dialog box A window that will display a message or prompt you to make a selection. Some kind of action must be taken before the dialog box will close and permit you to continue working.

Disk drive The mechanism that reads and writes information from or to a disk. Types of disk drives include floppy disk drive (A:), CD-ROM drive, zip disk drive, or hard disk drive (C:).

Download To transfer a copy of a file(s) from a remote computer onto your computer. Files will typically be downloaded from the Internet to your computer’s hard disk.

Dragging Select something, hold down the left mouse button, and move whatever is selected to another area of the screen, then release the mouse button. Types of objects that you might move are shortcut icons, folders, and files

Drop-down list A list of options that will display when you click on a downward facing arrow.

E-mail Electronic Mail. Messages that are sent and received between computers using the Internet.

“Esc” key Escape key. Located in the upper left corner of your keyboard. When pressed, the Esc key will cancel an action or process from continuing.

FAQ Frequently Asked Questions

File A collection of information, such as a document, that is stored (3 ½ floppy disk, hard disk, etc.) for future use.

Gigabyte Equal to 1,024 megabytes = 1,024,000 kilobytes = 1,024,000,000 bytes!!!

Hard disk A storage area housed inside of the computer used to save files for future use. Hard disks on new computers are capable of storing many gigabytes of data.

Hardware All of the machinery and physical parts of a computer system. Hardware includes things like the CPU, monitor, hard disk drive, printer, mouse, keyboard, etc.

Hyperlink (link) The means by which Internet users move among different bits of information on World Wide Web pages. The mouse pointer will change to a pointing hand when it is rolled over a hyperlink. Hyperlinks can be words, pictures, or other symbols. Word hyperlinks can often be identified by their bright blue, underlined text.

Icon A small picture used to represent things like files, folders, applications, commands, etc. Icons are often convenient shortcuts for opening an item or starting an operation. The desktop is a place commonly used for shortcut icons. The mouse is used to access an icon's corresponding item or function.

Internet A worldwide network of computers. This "network of networks" enables computer users to electronically communicate with each other, view pages on the World Wide Web, and access an endless world of information.

Internet Service Provider (ISP) A company or service that provides subscribers with a connection to the Internet. A fee is typically charged for Internet connection services.

Megabyte (MB) Equal to approximately 1024 kilobytes or more than one millions bytes.

Memory An internal component of the computer where files, software applications, and other data can be saved/stored.

Menu A list of commands or options from which you can make a selection. For example, the Start menu lists all of the software applications that the user can open on the computer. Menus in software applications enable the user to edit, format, and perform other functions within files and documents.

Microsoft Windows The operating system that runs most personal computers. It uses icons (picture shortcuts) and pull-down menus so that users can interact with applications, files, folders, disks, and other functions more easily.

Modem A piece of communications hardware that enables computers to exchange electronic data with each other via telephone lines. A modem is the data transmission device used for faxing and dial-up Internet service.

Monitor The piece of hardware that looks like a television screen, displaying information from the computer.

Mouse A device that controls the movement of the pointer. The mouse button is pressed to perform various functions, including placing a cursor, selecting items, opening files and applications.

My Documents A common place to save files. All files saved to My Documents are stored on the hard disk (C:). This is a good place to temporarily store files because it is always accessible from the desktop and Start menu, as well as every time a file is about to be saved.

Network Two or more computers that are connected for the purpose of sharing files, folders, programs, printers, and other resources.

Operating system The software that runs, monitors, and controls every function performed on a computer. Microsoft Windows is the operating system that runs most personal computers.

Peripheral An external hardware component that is typically attached to the computer's system unit case, such as the keyboard, mouse, printer, monitor, scanner, etc.

Reboot To turn off and restart the computer. This procedure is often necessary when the computer freezes, crashes, or when new software has been installed.

Recycle bin The place where deleted files are temporarily stored until the user permanently deletes them from the computer. Files may be retrieved from here if they were unintentionally deleted. The recycle bin must be emptied periodically in order to free up storage space on the hard disk (C:).

Scroll bar A vertical or horizontal bar on the right side or bottom of a window that enables the user to move to parts of a document that are not within immediate view. Clicking on the directional arrows enable the user to move up/down (vertical bar) or left/right (horizontal bar) within the document.

Selecting Marking a block of text by holding down the left mouse button and gliding the mouse over it. Selecting allows you to edit, format, or perform some other action on the marked area. Selected text will appear in a contrasting color. Selecting can also refer to making a choice in a dialog box by clicking on an option.

Start button Enables the user to access all of the software programs that are installed on the computer, as well as the My Documents folder.

Taskbar The area of the computer screen (typically the bottom) that displays an icon for each open window. The user can move among the open windows by clicking the mouse on one of the icons or by "toggling", using the Alt and Tab keys. The Start button is located in the taskbar.

Title bar The horizontal bar running along the top of the active window that displays the name of the file and the software program that is running. It also contains, the minimize, maximize/restore, and close shortcut buttons on the right side of the window.

Virus A program that is designed with purely malicious intent. The intent of viruses range anywhere from generating a very large list of e-mail addresses to causing serious file damage on a computer.

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