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Q1) in your opinion, what are the different types of common media used for storage, access and transmission of information, Explain each type in detail?

What are the different types of Common Media used for storage?

There are different types of storage media on the following including are,
-Solid State Drive.
-Cloud.
-Magnetic Tape,
-Hard Disk Drive.
-Optical Media.

Solid state drive,

Solid State Drives are rapidly becoming the preferred local storage device,also called SSD,
Solid State Drive is a data storage device, which is usually used in the computer. Even after power off, it uses flash memory to store data. SSDs have been designed for access to data similar to traditional hard disk drives Hard Disk Drive storage. An HDD can be usually replaced with direct Solid State Drive.

Cloud drive,

Cloud drive or storage is very lower speed and higher price rate on at.
Fast growing storage media is cloud storage. It works through your data transfer data to the Internet centers, and are owned by the service provider you have been selected. Since the data is being sent on the Internet, this method of transition is associated with your network speed and it can be slowed out. It also means that if you lose contact with the network, you also lose access to your files that are protected in the cloud. In addition, your data is protected from hardware failure. Your data careless copies will often be stored in this data center (and as possible data centers of all worldwide centers), that if a disk consumed data is damaged,

no data is lost. Since storage management is through a service provider, you will often have to pay a subscription fee. It may increase time with time, which makes cloud storage one of an expensive expensive option. It also means that depending on the service capability service to your cloud, depending on the service provider, if they decide to close the service, you will not be able to store your data with them. This storage medium makes it impossible to know long. However, due to your storage manager by service provider, you have the option to choose different products according to your needs. An example of this is Amazon glacier, which is developed to save 'cold data.

Magnetic tape,

Magnetic tape is usually made of thin, magnetic coating in a plastic film. The magnetic tape is less common than the first, although, the new magnetic tape drive is still ready. Hardware costs are expensive to write and read from magnetic tape. Once this hardware is bought, magnetic tape runs them in the form of cartridge. This cartridge can also hold large data (up to 15TB). However, due to the nature of the tape, the drives should go to the part of the tape where the data is stored to access it. This means that the layout of the tape drives is / EXE is extremely fast, while random I / O is very slow. These make factors to create all the factors to arrange the magnetic tape to the data at the appropriate price.

Hard disk drive,

Hard disk drives are available everywhere. You will find it inside your servers, home computers, laptops and gaming consoles. But how do HDD work and why are they still so famous? HDD works using two or more magnetic heads, which are connected to the dynamic arm, which read data received from one or more tough rotating discs coated with magnetic material. These magnetic disks are very famous for many reasons. HDD is relatively cheap than other storage media, when pairing with its high capacity, makes the perfect best of data stored in the large amount when the rapid access does not require random access. Backup and perform the domestic household use. HDD is also a long life, which he becomes a round-reliable media. However, animation is eventually ultimately cause their deformation and if the disk has reached a trauma, it can be damaged.

Optical media,

Optical media, now rarely saw the variable, magnetic optical drive, eagling the flexible material inside the plastic template in these devices. Then the magnetic optic car effect is used to read data from the magnetic disk based on the effect of lighting on the basis of light-based magnetic condition based on a high level of light. Magnate Optical Disks was made by a small maximum capacity (up to

256MB to 9.2GB), due to which they were inappropriate to store large quantities data. Magnetic optical disks were long and used to be very reliable, however, cheap optical media and flash memory devices have rejected them.

Information transmission access,

Information transmission can be defined as spreading or moving as much information from different places as possible or from one place to another. Methods of Transmitting Information

1. Ancient Method:

In ancient times there were different ways of transmitting information, • oral • beaten drum town carrier • whistling • drawing diagram representation.

2. Innovative method:

The information was easily able to pass through the concept of modern form within a short period of time. Examples are; printout copies telephone; radio; television; internet; tele text; satellite.

There are different ways to classify or transmit sources for the transmission of information and they can be classified into two which describe the following.

Electronic Mean:

Print out Copies le Telephone • Radio • Television • Internet • Telex • Satellite • SM

Non-Electronic Mean:

Verbal • Beaten Drum Town Carrier Whistle • Drawing diagram Can be done.

The method of obtaining information can be obtained by the following reasons.

A. Audio:

Audio information can be received in a sound format, such as music. Broadcasting, audio recording, audiotape,

B. Visual:

Visual information can be received in the form of text, images and charts. Such as newspapers, magazines, journals, billboards. Audio,

C. Audio-Visual Forms:

Audio-visual information can be obtained from audio-visual information. For example, movies, music videos.

THE END...

Q2. (a)Explain Metropolitan Area Network (MAN) with a suitable example?

Metropolitan area network,

Also called short form (MAN)

By 1994, local area network (LAN) was established well for supplying data communication in buildings and offices.

Local area network is known as metropolitan area network.

Metropolitan Area Network, is a network that combines users in computer geographical area or region to the area, which covers more large area network, but is smaller than the covered area. This term is applied in the same network in a city network in a city which can also offer effective connection to the wide area network. This means also to bring many local area networks to bowling and bowling. Later use is sometimes called Campus Network.

For example, Metropolitan area is a class of network network that works in a geographical area in the boundaries of 4,5 to 50 kilometers, a wide area network provides a lot of coverage that provides a man. A Van LAN and Metropolitan Area Network connects, its example is the WAN Internet.

B) Define topology? What topology would you chose to setup a local network area and why?

Topology,

They way computers are connected together in a network is called topology of network.

A local area network (LAN) is a good example of a network that represents both logical and physical topology. All terminals in the LAN are connected to each other. The mapping of this interconnection is physical topology, while the data flow determines the logical topology of the network.

There are seven basic types of physical topology:

-Point to point topology.

-Bus (point to multi point) topology.

-Star topology

-Color topology

-Tree topology

-Mesh topology

-Hybrid topology.

THE END…

Q3. (a)Discuss a few limitations of image scanners? How Optical Character Recognition (OCR) device overcomes these limitations?

Few limitations of image scanner on the following describe at?
In image scanner,

Image Scanner - A tool often used exclusively with a scanner, an optical scan of images, printed text, handwriting or an object and converts it into a digital image. There are different types of desktop flat bed scanners commonly used in offices where the document is placed on a glass window for scanning, and 3D scanners used for industrial design, reverse engineering, testing and measurement, orthotics, gaming and other applications

For example, drum scanner, flatbad, Roller scanner.

The following limitations are.

Scanner does not support more than 200 character share names.

Scanner edits access time to directories by crossing the file system.

Resilient file system only supports scanning. Auditing is not possible because the drive is not attached to the filter driver.

The following note covers the limitations related to data visualization parallel scanner process:

Parallel scanner cannot be run for NFS shares.

Parallel scanner does not support step-by-step scan. Only full scans are supported.

For Windows File Server Agents older than version 5.2, the scanner cannot be executed. Even if it is configured, a single thread scan runs.

Scanner maintenance can be costly. Many companies use high volume scanners to handle large amounts of paperwork.

Scanners are relatively slow.

How optical character recognition device overcomes these limitations?
Optical character recognition

Optical Character Recognition the use of technology to outstanding printed or handwritten text characters within digital images of physical documents, for example scanned paper documents. The basic OCR process involves examining the text of a document and translating the characters into code that can be used for data processing. OCR is called text recognition.

A combination of hardware and software used to convert physical documents into machine-easy to read text. Hardware, for example optical scanners,

Limitations on the following

Character or Font size, OCR cannot replace fonts with large or very small font sizes. This is a text-based system. Cannot make critical letters and words available,

Languages many languages have special characters, and unless the correct OCR software is loaded, these characters can be lost or misidentified.

Edit the layout. OCR errors usually need to be corrected in order as well as repeated edits. Global spelling checks may introduce other errors.
Case sensitivity for editing, The use of spelling checks to correct OCR text will not normally allow for consideration of the case of characters, e.g., cat and CAT will be treated equally.

B) Elaborate the use of magnetic ink character recognition.

Magnetic Ink Character Recognition also called MICR.
is a technology used to verify the legal status or authenticity of paper documents, especially checks. Special ink, which is sensitive to magnetic fields, is used to print specific characters on original documents. Information can be encoded in magnetic characters.
The use of MICR can increase security and reduce the damage caused by any type of crime. If a document has been forged - for example, a forged check made using a color photocopier, the magnetic ink line will not respond to magnetic fields, or when to retrieve information scanning using a tool will generate the wrong code. Magnetic letters, even a valid check can be rejected if the MICR reader has pointed out that the account owner has an incorrect check date.

THE END...

Q4. (a)Differentiate between printer and plotter?

Printer,

A printer is basically an output device that creates graphics, images, text, etc. on paper. Now a day's printers have different printing methods, features and speeds according to different prices. More expensive printers have higher features than lower priced ones. Users connect their computers to printers and there are many printer options available to users. Wireless printers are also available in modern times that work on your mart phones and tablets and portable devices. Instead of downloading photos from the camera one day, print those photos directly one day.

Plotter,

Plotters are very expensive and its use plotters are not commonly used for engineering and drafting and some other specific fields. Are used. Plotters are high cost and high performance printers and are used for professional purposes such as signs, posters, etc. where there are multiple automatic colors and pens that are used to create various designs and colors such as blueprints and diagrams etc.
Main difference is that,

A printer is used to print a line, while a plotter allows users to print more than one line at a time. The printer is only used to print the given data with another paper printer. You can do more than just use this printer to create different maps and diagrams. This option is not available in printers.

B) Explain the printing process of laser printer?

Printing process,

The laser beam typically, an aluminum gallium arsenide semiconductor laser produces an image of this page for printing on electrically charged, selenium coated, rotating, and cylindrical drum. Or, in later versions, more commonly, a drum called an organic photoconductor made of N-vinyl carbazole, an organic monomer. Photoconductivity allows charged electrons to move away from light regions. Power ink (toner) particles are then electrically attracted to the charged areas of the drum that do not have a laser beam. The drum then transmits the image to the paper through direct contact (which passes through the machine). Finally, the paper is delivered to a finisher, which uses the heat to instantly fuse the toner that reflects the image on the paper, in the following steps involve on the printing process are,

Exposing,
Raster image processing.
charging,
fusing,
Transferring,
Developing,
Continuous printing,
cleaning and recharging,
continues printing,
and malfunction.

Laser printer,

Xerox PARC in 1970s was introduced laser printer, laser printing is an electrostatic digital printing process.

It repeatedly produces high quality text and graphics and moderate quality images by moving the laser beam back and forth on a negatively charged cylinder, describing the controversial charge image as a "drum". The drum then selects electrically charged powder ink (toner), and transfers the image to paper, after which it is heated so that text, imagery, or both are permanently But can be fused in paper. Like digital photocopiers, laser printers employ the process of zoographic printing. Laser printing differs from conventional xerography as applied to the latter in analog photocopiers.

THE END…