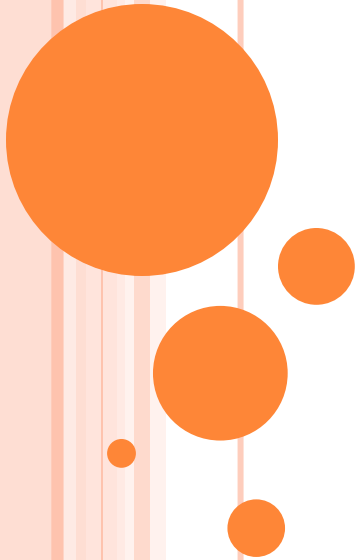


STORAGE DEVICES

PART 2

CS-305



FLASH MEMORY

- Non-volatile memory.
- Consists of solid chips with no moving parts.
- It is more durable and fast.
- It does not need to continuous power to retain the data.
- More expensive than magnetic storage.
- The data stores on flash memory storage can be erased and new data can be written.
- Widely used in smart phones, digital cameras, portable media player, tablet and other mobile devices.



FLASH MEMORY

Different types of flash memory storage are solid state drives, USB flash drives and memory cards.

- Solid State Drives (SSD):

- Used flash memory to store data and programs.
- The term solid state means that they have no moving parts.
- Available in different sizes 1.8 inch, 2.5 inch and 3.5 inches.



FLASH MEMORY

- Solid State Drives (SSD):
 - Used all types of computers such as desktop, laptops, tablets and mobile devices.
 - Storage Capacity can be up to 1TB or more.
 - External SSD are also available.



SOLID STATE DRIVES(SSDs)

Pros

- Faster data access and transfer.
- Use very little power. and produce less heat.
- Light-weight.
- More durable.
- Do not generate noise.

Cons

- More expensive than magnetic hard drives.
- Recovery of data in case of failure can be more difficult than magnetic hard drive.



FLASH MEMORY

- Solid State Drive(SSDs):



FLASH MEMORY

- USB flash Drives:
- Small and portable storage device.
- Connected to the computer through USB port.
- Commonly used to transfer documents, photos, music and videos from computer to another.
- It can be carried in pocket easily.
- Available in different sizes and capacity.



FLASH MEMORY

- USB flash Drives:
- Storage capacity of USB drive can be up to 256 GB and more.
- Also called Thumb drive, Key drive or jump drive.



FLASH MEMORY

- USB flash Drives:

- Ω Wireless Flash Drive

- Used to store and share data wirelessly across mobile devices and computers.
- Portable and very easy to use.
- Connects wirelessly up to 8 devices.
- Stream video up to 3 devices at the same time via WIFI.



FLASH MEMORY

- USB flash Drives:

- Ω Wireless Flash Drive

- It can provide up to 4 hours of wireless streaming on single battery charge.
- Available in 16 GB, 32 GB and 64 GB.
- Example: SanDisk Connect.



FLASH MEMORY

- USB flash Drives:
- Ω Wireless Flash Drive



MEMORY CARDS

- Removable flash memory to store data.
- Most of these cards are very small and can retain data without power.
- Existing data can be erased and new data can be written easily.
- Available in many shapes and sizes.
- Commonly used in mobile phones, portable media player, digital cameras and other devices.



MEMORY CARDS

- A memory card can be inserted into a slot on computer or mobile devices.
- A **card reader** can be attached to the computer if it does not have a slot.



MEMORY CARDS



CLOUD STORAGE

- Service to the computer and mobile user to store data online.
- This service is provided and managed by a cloud storage service provider in data centres that may consists of hundreds of servers to store data.
- The data centre can be located anywhere in the world.
- The storing of data on cloud storage allows the user to access it from anywhere in the world using internet.



CLOUD STORAGE

- Many cloud storage providers are available on the internet.
- Different providers offers different types of services for the users.
- Some provide storage for specific type media such as photos.
- Other allow the user to store any type of data and provide backup services.



CLOUD STORAGE

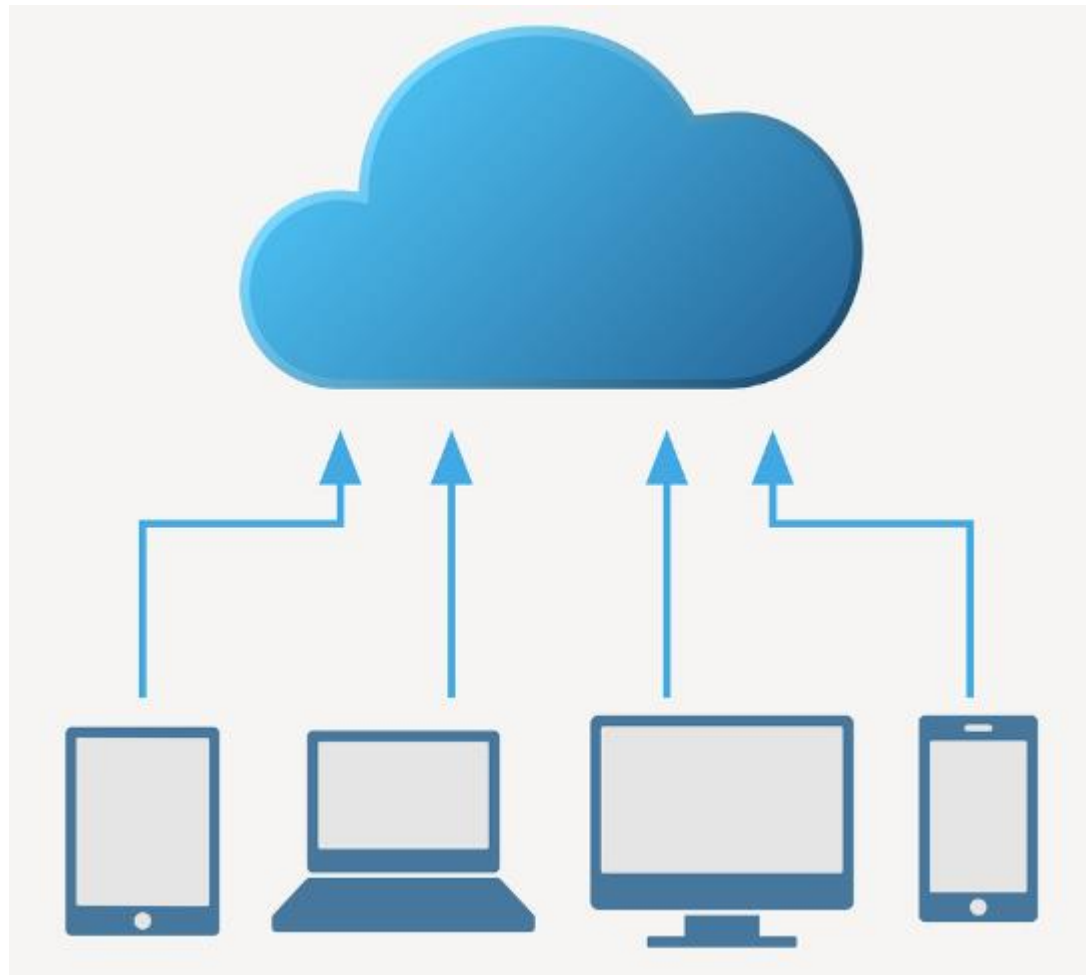
- Many service providers offer a limited amount of storage for free with monthly fee for higher capacity.
- Other charge fee per gigabyte per month.
- Examples: DropBox, Google drive, Amazon cloud Drive and Microsoft OneDrive etc.



CLOUD STORAGE



CLOUD STORAGE



CLOUD STORAGE

- OneDrive (SkyDrive):
- Service provided by Microsoft.
- Used to store photos, videos and documents etc.
- The files stored their type and can be searched easily.
- User can access this services by computers and mobile devices.



CLOUD STORAGE

- OneDrive (SkyDrive):
- Works closely with Microsoft office applications such as MS Word.
- Easy to open and edit files from OneDrive in the applications such as word.
- The user must signup the Microsoft account to use OneDrive.
- Provides 15 GB of free space for storing files.
- User can also buy more space if required.



CLOUD STORAGE

- **DropBox:**
- Popular cloud storage service.
- **Reliable** and **easy**.
- User can store and access the files at any time using DropBox website, desktop application or mobile applications.
- User can store any type of file.



CLOUD STORAGE

- **DropBox:**
- The files can be **easily moved** from the computer to the cloud storage by **dragging** and **dropping** them to DropBox folder on the computer.
- The services synchronize the files across all of devices
- **No size limit** on files to upload on DropBox.
- Provides **2GB free space on sign up**.
- User can also buy more space if required.



CLOUD STORAGE

- Google Drive:
- Google drive is cloud service from GOOGLE.
- Provides different services such as word processor, Spread sheets application and presentation builder.
- It provides 15 GB of free space to store files.
- Maximum size of a file can be up to 10 GB.
- Any user with a Google account can access this service using Google drive website as desktop or mobile applications.

