STORAGE DEVICES

Mass storage devices include all types of disk drives and tape drives. Mass storage is distinct from main memory, which refers to temporary storage areas within the computer. Unlike main memory, mass storage devices retain data even when the computer is turned off. The main types of storage devices are:

Floppy Disk: The floppy disk drive continues to be included in new computer systems, even though years ago it was made obsolete by newer storage devices. A floppy disk uses *electromagnetism* to encode data. The floppy disk has come in a variety of sizes during its lifetime, including 8inch, 5.25inch, and 3.5inch disks.

Optical Disk: Unlike floppy and hard disks, which use electromagnetism to encode data, optical disk systems use a *laser beam* to read and write data. Optical disks, also called Compact Disks (CDs), have very large storage capacity, but they are not as fast as hard disks. Disks are random access media because a disk drive can access any point on the disk at random without passing through intervening points. Both disk drives and disks come in two types–read only and read/write. Read/write CDs are expensive than read-only CDs.

Memory Stick (Flash Drive): In 1998, Sony (a popular electronic goods manufacturing company) started promoting

a new storage device called *Memory Stick*. Within a short span of time, the memory stick became a preferred way of transferring files, songs and data among computers and different compact electronic devices such as digital cameras, MP3 player, etc. It is extremely compact in comparison to conventional storage devices such as CD or floppy disk. In looks, a memory stick is just like a flat AA battery (pencil cell). Memory sticks are available in 32MB, 64MB and 128MB sizes. Despite its compact size, a memory stick can hold photos, movie clips and hundreds of MP3 files and transfer files easier and much faster. To retrieve data directly from a memory stick, you need a special device known as a memory stick reader. With the help of this device, you can read and transfer data from memory stick to your computer. Although some devices like digital camera employ memory sticks, they have the option of reading and transferring data without the help of memory stick reader.

Mass storage is measured in kilobytes (1,024 bytes), megabytes (1,024 kilobytes), gigabytes (1,024 megabytes), and terabytes (1,024 gigabytes). Mass storage is sometimes called auxiliary storage.