

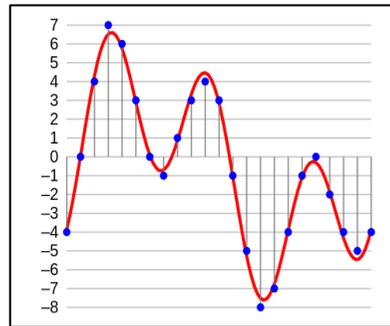


**Binary conversion** converting numbers between binary (Base 2), decimal (base 10) and hexadecimal (base 16).

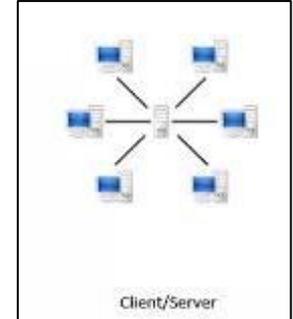
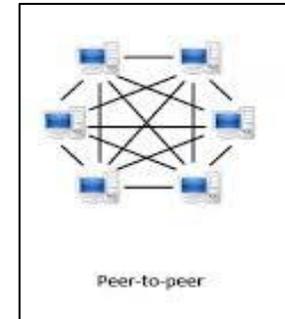
Decimal (Base 10)	Binary (Base 2)	Hexadecimal (Base 16)
0	0000	0
1	0001	1
2	0010	2
3	0011	3
4	0100	4
5	0101	5
6	0110	6
7	0111	7
8	1000	8
9	1001	9
10	1010	A
11	1011	B
12	1100	C
13	1101	D
14	1110	E
15	1111	F

**Representing sound as binary**

A sound is literally a vibration that travels through a medium (as a wave). In order to store sound in a digital format, the sound must first be captured with an input device, converted to an analogue electrical signal, the electrical signal needs to be sampled and then the digital data can then be stored.



- 1 Bit = Binary Digit
- 8 Bits = 1 Byte
- 1024 Bytes = 1 Kilobyte
- 1024 Kilobytes = 1 Megabyte
- 1024 Megabytes = 1 Gigabyte
- 1024 Gigabytes = 1 Terabyte
- 1024 Terabytes = 1 Petabyte
- 1024 Petabytes = 1 Exabyte
- 1024 Exabytes = 1 Zettabyte
- 1024 Zettabytes = 1 Yottabyte



<b>Units</b>	the amount of data that can be stored in the storage device. This storage capacity is expressed in terms of Bytes.
<b>Primary Storage</b> <ul style="list-style-type: none"> <li>• Read Only Memory (ROM)</li> <li>• Random Access Memory (RAM)</li> </ul>	is any storage device or component that can store non-volatile holds instructions for starting up the computer, ROM is <i>NOT</i> VOLATILE, which means the data is NOT lost every time the computer is switched off. is where information and data currently in use is stored, RAM is VOLATILE, which means the data is lost every time the computer is switched off.
<b>Secondary Storage</b> <ul style="list-style-type: none"> <li>• Magnetic Storage</li> <li>• Optical Storage</li> <li>• Solid State</li> </ul>	used to retain a copy of programs and data that need to be kept long term. Magnetic Storage Hard Disk Drives (HDD) is a data storage device that uses storage to store and retrieve digital information such as a Hard Disk Drives (HDD) saves data as patterns of dots that can be read using light. A laser beam is the usual light source, such as a CD-ROM, DVD-ROM or Blu-Ray. means it has "no moving parts", this is a type of non-volatile storage, it retains its information even without power. So it is ideal for devices such as cameras, solid state drives, memory sticks and so on.

<b>LAN</b>	(Local Area Network), is a computer network that spans a relatively small area.
<b>WAN</b>	(Wide Area Network), is a computer network that covers a large area.
<b>Peer 2 Peer</b>	is one in which two or more PCs share files and access to devices such as printers without requiring a separate server
<b>Client-server</b>	a server provides resources and services to one or more clients (personal computers, printers and other devices)

