

## Logical vs. Physical

High-level versus low-level. Logical implies a higher view than the physical. Users relate to data logically by data element name; however, the actual fields of data are physically located in sectors on a disk. For example, to find out which customers ordered how many of a particular product, the logical view is customer name and quantity. Its physical organization might have customer name in a customer file and quantity in an order file cross referenced by customer number. The physical sequence of the customer file could be indexed, while the sequence of the order file could be sequential.

### Logical Drive C: - Physical Drive 0

In a Windows PC, a single physical hard drive is drive 0; however, it may be partitioned into several logical drives, such as C:, D: and E:.

### Virtualization

Various virtualization methods create a logical "abstraction layer" for dealing with the physical hardware. For example, virtual machines enable multiple operating systems to run in the computer, each accessing the hardware via a logic layer rather than direct physical contact.