

Definition:

It is a technique that allows users to quickly retrieve records from the database. Its main purpose is to provide a basis for both rapid random lookups and efficient access of ordered records.

A general example can be : say we have a huge number of balls which have a color as well as a number assigned on it. If we want to quickly find a ball with a given number we may have to linearly search every ball. But if we mark balls with numbers starting with '1' with a color, starting with '2' with another color and so on, we may easily find required ball within less accesses.

This is called indexing. We have the precise address where the required object is can be, which helps us retrieve the data quicker.