Random Access Files (Research)

Random access files are basically records that can be accessed in any sequence, whether the file is being written to or being read.

The main advantage of random access files is that any record of a file is available at any time. The main disadvantage of this is that it uses a lot more resources of the disk space to make this possible, which can easily result in a lot of wasted space if the files are just going to be accessed once.

When disks came into use for storing files, it became possible to read the bytes or records of a file out of order, or to access records by key, rather than by position. Files whose bytes or records

can be read in any order are called random access files.

Two methods are used for specifying where to start reading. In the first one, every read operation gives the position in the file to start reading at. In the second one, a special operation, seek, is

provided to set the current position. After a seek, the file can be read sequentially from the now current

position.

In some older mainframe operating systems, files are classified as being either sequential or

random access at the time they are created. This allows the system to use different storage

techniques for the two classes. Modern operating systems do not make this distinction. All their

files are automatically random access.

Fuentes:

Power Basic. *Random Access files*. Extracted from: http://www.powerbasic.com/support/help/pbcc/random\_access\_files.htm

Operating Systems Designs and Implementations Third edition (2006). *File Access*, Page 479