

Different types of Indexing Techniques

- 1) Ordered Indices : Based on the sorted ordering of values.
- 2) Hashed Indices :- Based on the values being distributed uniformly across a range of buckets. The buckets to which the value is assigned is determined by a function called a Hash function.

Ordered Indices :- Index is associated with with a particular search key.

* The Records in the indexed file may themselves be stored in some sorted order.

A file may have several indices, on different search keys.

Two types of Ordered Indices :-

A) Primary Index

B) Secondary Index

Primary Index :- Let us assume we have a file whose records are ordered sequentially on some key. We create an index file of this file in which the search keys are also ordered same as the order of the file. So such index files is called Primary Index. A such files with primary index is called Index - Sequential files. Primary indices are also called Clustering indices

Two Types of Primary Index

Primary Index

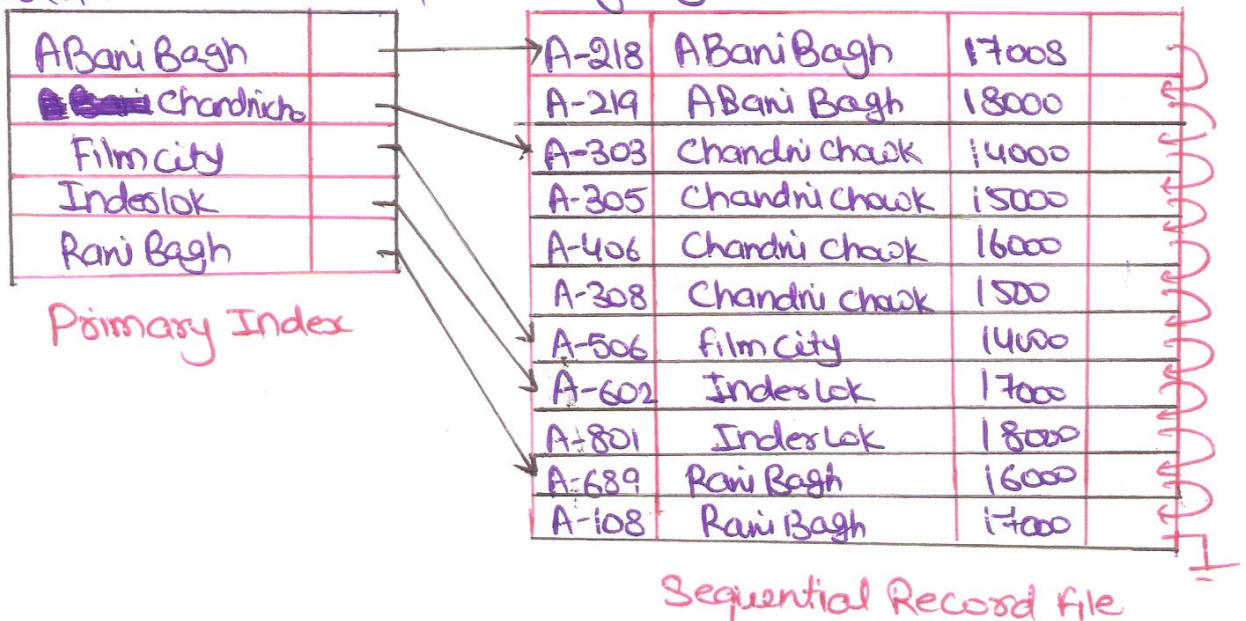
Dense Primary Index

Sparse Primary Index

Dense Primary Index

In this Index Record contains the Search-Key Value and a pointer to the first Data Record, with that Search-Key Value.

The Rest of the Records with the Same Search Key-Value would be stored Sequentially after the first Record.



Disadvantage : It has to store a list of pointers to all records with the Same Search-Key Value.

It takes some extra time in Search and an extra space in Primary index file.