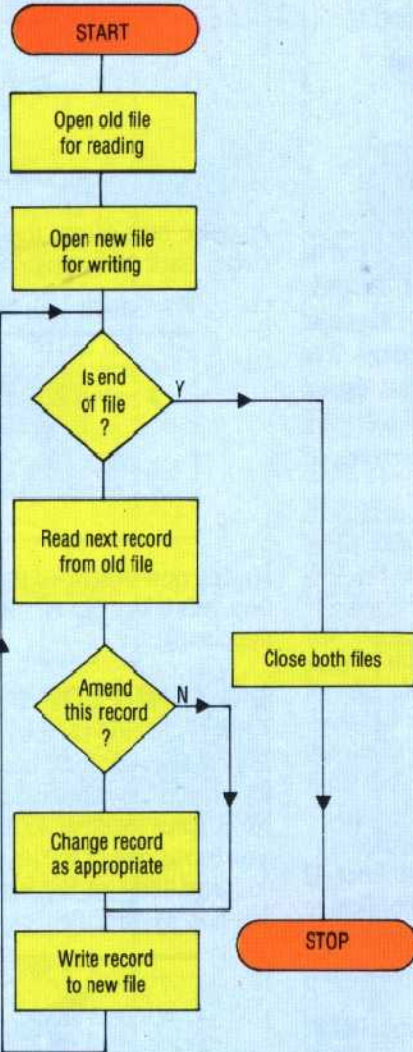


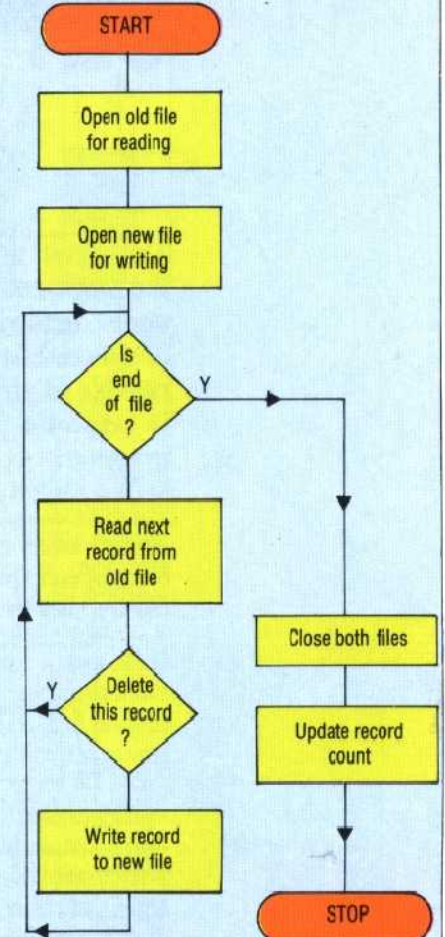
## Amending A Record

Amending a record (altering the information within it) is achieved with a combination of these methods. First, all preceding records must be copied into a new file. When the record to be updated has been reached and read into RAM, it can be updated by the program. The updated record is written to the new file and all subsequent records from the old file are copied across to the new file. Any number of records can be updated on one pass through the file



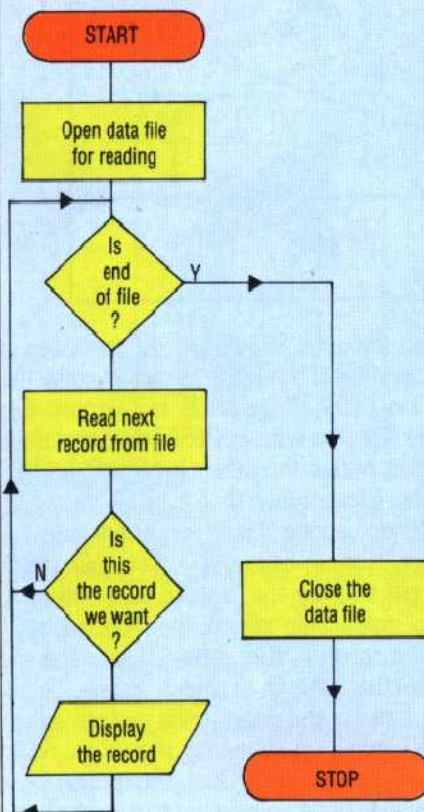
## Deleting Records

Records can be deleted from a file by reading and copying through to the record to be removed. This record is then read, but not copied to the new file. Finally, the remainder of the file is read and copied to the new file. A number of records could be removed in a single pass. As when records are added, it is essential that the record count is immediately updated



## Retrieving Records

Sequential files are not very suited to the sort of application where you fetch old records out of the file. Each time you search for a new one, the whole file has to be read again, which is very time consuming. If you are searching through a list of names for a particular record then your program will just go through a loop, examining each record and carrying on if it doesn't match. If you need a number of records, they can be read one after another but only in the order they occur in the file. For this reason, you often find sequential files are sorted in some order (alphabetically, for example) before they are stored



## Adding Records

Records can be added to a file in one of two ways. Some BASICs have an APPEND command that lets you add directly onto the end of a file. To add records to files that don't use this command, you have to read through the whole file and produce a copy of it in a new file. Instead of closing the new file, you then write the new records onto the end of it and close both files. In both cases, it is necessary to update the record count. If it's stored with the file, the update routine should make sure that the new value is written to the file immediately so that there is no possibility of losing the information

