Sorting

FoxPro provides the sort command for sorting records stored in a database file the sorting is done on a single field or combination of fields. The records can be arranged in the ascending or descending order according to sort field. When we sort a database file FoxPro sorts the records as per the specified order. It will create another database file and stores the sorted records in the new file. The database that we want to sort must be open.

Syntax:- sort on <field name> to <new database file name>

e.g:- use student 🡨

 sort on roll to stud1 🡨

The above command will sort the records of student database based on roll field in ascending order and transfer the sorted records into a new file stud1.dbf. If we want to show the sorted records then we should give the following commands.

Use stud1 🡨

List 🡨

Use student 🡨

Sort on name to sname 🡨

The above command will sort the records of student database file based on name field. It will sort the records of student database file based on name field. It will sort the record in ascending order and transfer it into a new database sname.dbf , if we have name fields value in capital as well as small letter the it will first sort the capital letter first then it will sort the small letter. It should be better that each name should be of same case.

We can save the sorted database file into another location if we want using following command.

Use student 🡨

Sort on name to d:\sname 🡨

Option with sort

By default FoxPro sorts the data in ascending order and it is case sensitive. It will place the upper case letter before lower case letter. If we want to sort the records in descending order then we will use ‘/d’ as suffix to the sort field name.

Use student 🡨

Sort on roll/d to sroll 🡨

The above command will sort the records of student database based on roll field in descending order and transfer the record in sroll.dbf file.

Ignoring case while sorting :- We use ‘/c’ with sorted field name to sort the database record ignoring case. It means it will not make differentiation between uppercase and lowercase letter.

Use student 🡨

Sort on name/c to name1 🡨

Sort on name/dc to name2 🡨

For selected fields to transfer we will use fields clause like following :-

Use student 🡨

Sort on roll to sroll fields roll, name 🡨

The above command will sort the records of student database in ascending order and transfer the records with only two fields roll and name into a new database sroll.dbf, it means sroll.dbf has only two fields.

For selected records:-

Sort on roll to sroll2 for roll>=5 and roll<=15 🡨

**Indexing :**- Indexing is a technique in which the record of database will be sorted. Unlike sorting indexing a database file does not make duplicate the database file. it just stores the index field and corresponding record number in the index file. Therefore the index file is normally smaller than the sorted file.

Syntax:- index on <field name> to <index file name>

e.g:- use student 🡨

 index on roll to mroll 🡨

The above command will create an index file mroll.idx on the roll filed then it will display a message total number of records index.

Index on name to mname 🡨

The above command will create a new file mname.idx and when we give the list command list will show the records using mname.idx index file.

Removing duplicate records from the index file we use ‘unique’ clause.

Use student 🡨

Index on roll to mroll unique 🡨

The above command will create an index file mroll.idx without duplicate records in this index file there will be no duplicate records.

Creating index file on multiple fields

Use student 🡨

Index on city+name to add1 🡨

The above command will index the student database on two fields. First field is ‘city’ which is main field and second is name. It will arrange the records firstly city wise then in city name wise and make an index file add1.idx.