BKIndex

Version 1.00

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(distributed as Shareware)

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What does BKIndex do?

Brother's Keeper is a very well thought out program and makes it relatively easy to keep all the details straight. Having incorporated information from several different manually maintained systems created by various relatives, I certainly prefer the computerized approach. Brother's Keeper has also made it possible to locate and correct the typographical errors that invariably creep into manual systems. Everything is fine as long as I am working at the PC, Brother's Keeper can locate and correct records with only minimal input on my part. The only difficulty results in trying to get back to a paper system.

When someone gives me information, I try to supply them with a printed group sheet. This serves two purposes. First, I give them positive feedback that their information was important and useful. They like seeing accurate and neatly printed group sheets. Besides that, everyone seems to love to see their own name in print and to talk about their kids and grandkids. Also, if they aren't on a computer system, I've saved them lots of work. Secondly, this helps me catch errors. It's a quirk of human nature that it's difficult to proofread a marked-up copy. Some errors don't show up until after you've printed that "final" copy.

I also like to print group sheets and file them in a book. Since I don't have a portable computer, this is the set of information which goes with me when I'm doing research. This works well, if you can locate the particular sheet(s) that relate to the person you are researching. Of course, you could print a sheet for every person in your database, but I suspect this would quickly become unmanageable. Also, there would be lots of duplication. If a husband and wife have been married only once, that is, to each other, then the husband's sheet and the wife's sheet would contain exactly the same information. The sheet for an unmarried child would only repeat information from a parent's sheet. Clearly, you could print selected group sheets and still cover everyone in the database.

I began to put together a set of group sheets, each with a header indicating the ID number of the person used to generate the sheet, that is, the husband or wife. Thus each sheet had a unique number and was filed in numerical order. In the case of the once married husband and wife, I printed whoever the relative was. As you might guess, I quickly got into trouble. When looking someone up, I had to remember who they were married to or who their parents were in order to find the right sheet. When asking for information, people tend to talk about "Aunt Hatttie's first husband". Before you can begin making notes you have to find the page, which may be in her father's name, or the second husband's name, or whatever. I needed an index that kept multiple marriages straight. Brother's Keeper will handle multiple marriages, but only the first marriage is considered in many functions. In my family, this was not enough.

I started generating an index using a second database program. This was doomed to failure from the start. Every change to Brother's Keeper had to be manually noted and then keyed into the second database, and this was tedious to say the least. Moreover, I wanted multiple references to all the possible married names a woman might have. This involved a relational database, and that was even more complicated than the flat field database I was using. Finally I hit on the idea of a program that could read the Brother's Keeper data files and generate the index directly with all the logic of handling names and which sheets to print. The result is BKIndex.

System Requirements:

The distribution diskette contains the following files:

        BKI.EXE   BKIndex main program
        SORTF.COM   Shareware file sorting utility
        SORTF.DOC   SORTF documentation
        BKI.DOC   this file in ASCII format
        BKI.50   this file in WordPerfect 5.0 format
        PRINTDOC.BAT   batch file to print documentation

BKIndex should run on any 640 KB PC compatible, with or without hard disk. It was tested and developed on a 386 EGA system, so there may be incompatibilities I'm not aware of. Please let me

know if you experience any problems.

BKIndex will create some files when you run it:

      BKIDEF.DT4   saved set of user selected options
      QQQQQQQQ.QQQ   unsorted index file

The user selected file (default is INDEX.DAT) is also created. At this point QQQQQQQQ.QQQ is erased. If you happen to be using the file name, QQQQQQQQ.QQQ, you'll need to take steps to protect it from BKIndex.

BKIndex looks for BKIDEF.DT4 and SORTF.COM in the current drive and directory. If you have BKI.EXE and SORTF.COM in a directory on your path, then they will work fine, but will start with "factory" defaults. BKIndex must be started from the directory where it resides in order to locate the saved defaults. This is just like Brother's Keeper.
Naturally, BKIndex must be able to locate the files FAMLFILE.DT4 and MARRFILE.DT4. You must specify where they are to be found. This will support multiple sets of data in case you are keeping separate files. The output files will be created in the same location. One thousand names and 400 marriages produces two files of approximately 70K.

Installing and Starting BKIndex:

BKIndex is an executable file originally written in Quick Basic. It can be copied directly into wherever the Brother's Keeper executable files are or run from floppy. Let's assume that you run Brother's Keeper from hard disk C: in a directory called \BK. If you have BKIndex on a floppy disk in drive A:, then:

      copy a:*.* c:\bk [ENTER]

will install BKIndex. To run it, type:

      c: [ENTER]
      cd \bk   [ENTER}
      bki   [ENTER].

BKIndex reads the files FAMLFILE.DT4 and MARRFILE.DT4 to find the information it needs. It does not alter these files in any way, but it must access them again and again to construct the index, so the speed depends on the device used. If your data is on floppy disks, this will be a slow process. This program is very I/O intensive. That is, the speed is controlled by how fast the disk can read and write, not so much by how fast your computer is. If you can run BKIndex on a hard disk, by all means do so. It will be even faster on a RAM disk if you have the memory to support that.

Please note that in the above example, C:\BK is the "program path" that Options refers to. If the data files (FAMLFILE.DT4 and MARRFILE.DT4) were in a different directory, like C:\BKDATA, then this would be the "data path" that options needs. I encourage you to use this approach for one major reason. Each time you get a new version of Brother's Keeper, or alter the "path to .dt4 files" you are setting up to save a new set of data, and this occurs automatically upon exit. So, if you happen to run the program from disk, just to look, and then exit, here's what happens. First, since the path wasn't set, you had none of your data. On exit you saved a blank set of data somewhere. If you haven't already overwritten your working files, you may when you copy the files from floppy to hard disk. The danger is very real if you keep everything in one directory. I encourage you to create specific and separate data and program directories. All the *.dt4 files go in the data directory. All the program files go in the program directory. Now start Brother's Keeper or BKIndex and immediately go to Options and set the paths. Exit the program. You now have a fresh FOPTIONS.DT4 and BKIDEF.DT4 file in the program directory, and these are the only *.dt4 files there. Your data is safe. Just remember to repeat this process whenever you get a program update.

Main Menu Commands:

The Main Menu allows five possible main responses: Options, Check, Generate, Index, and List. Just press the first letter of the desired option. "Options" allows you to set all user selections, colors, file names, etc. "Check" checks FAMLFILE.DT4 for unused persons and missing first or last names. "Generate" creates and sorts the index file and creates a list of group sheets needed. "Index" prints the index file (screen or printer) and "List" prints the list of group sheets (screen or printer).

Following the convention in Brother's Keeper, the lower left corner indicates the location of the Brother's Keeper data files (data path) and the lower right corner indicates "screen" or "printer". [F9] toggles between these. There is no "print to disk" routine, because a disk file is always created.

Options:

The options file operates very much like that in Brother's Keeper. Use cursor keys to highlight the item you want to change and just type in the desired response. At that point [ENTER], [UP], [DOWN], or [F1] - [F4] will register the response and put your new choice into effect. BKIndex will attempt to edit the response to keep it within acceptable limits. For example, the only allowed responses to "Output Device" are "SCREEN" and "PRINTER". The logic here is not perfect, as it seemed to require more effort to block weird responses than it was worth. So, if you try hard, you can get the logic to fail. The average user should not have any problems and there should be no way to damage any Brother's Keeper files short of using one of the reserved names in Brother's Keeper for one of your output files.

[F1] exits to the Main Menu and creates the file BKIDEF.DT4 in the directory shown in "Program Path". Hopefully this is where BKI.EXE, SORTF.COM, and Brother's Keeper reside.

[F2] exits just like [F1], only it doesn't save the options to disk.

[F3] resets all options to the last set saved. If this isn't working, check the "Program Path" and make sure you start BKIndex from there.

[F4] resets all options to "factory" defaults.

The first four lines set screen colors, with 0-7 legal for background and 0-15 legal for foreground and highlight. 0-7 are low intensity colors, 8-15 are high intensity:

        0, 8 - black
        1, 9 - blue
        2, 10 - green
        3, 11 - cyan
        4, 12 - red
        5, 13 - magenta
        6, 14 - brown (yellow)
        7, 15 - white

This should allow you to choose an acceptable combination regardless of your display type.

The next ten lines describe printer characteristics:

        lines per page   - 66
        columns per page - 80
        top margin   - 6   (6 lines = 1" @ 6 LPI)
        bottom margin   - 6   (6 lines)
        left margin   - 7   (start in col. 8)
        right margin   - 7   (last col. = 73)
        indent   - 3   (3 columns)
        between columns - 3
        skip lines   - 0   (between names)

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          aspect factor   - 2.4 (see Index)

"Indent" through "aspect factor" also affect "screen" printing. See page for an explanation of aspect factor.

"Screen lines" allows selection of 25, 30, 43, 50, and 60 which Quick Basic supports, but your monitor may or may not. 25 and 43 both work on EGA, so feel free to experiment. VGA should support 25, 43, and 50.

"Program path" is where the program files (Brother's Keeper, BKI.EXE, SORTF.COM, BKIDEF.DT4) are to be found.

"Data path" is where the data files (FAMLFILE.DT4 and MARRFILE.DT4) are found and where the output files (QQQQQQQQ.QQQ and INDEX.DAT) are created.

"Output file" is the name of the output file created by "Generate" or printed by "Index".

"Output device" is "SCREEN" or "PRINTER".

"Index order" is "NORMAL" or "REVERSE". See Generate, page .

"Print string" is the setup string for your printer. You can use this to set font, lines per inch, draft or letter quality, etc. Refer to your printer manual for details. Note the default is "NULL", meaning that no setup string is sent.

Check:

This command looks at the FAMLFILE.DT4 file for error conditions. When complete it displays or prints a list of UNUSED records and MISSING FIRST/LAST NAMES. If you delete a marriage with unmarried children, or delete unmarried children from a marriage, there will be ID numbers which are not linked to other records. BKIndex locates these so that you can either link them in or reuse the ID numbers.

Brother's Keeper allows you to enter one name only for a person. If BKIndex cannot locate a space in the name, it treats this as MISSING FIRST/LAST NAME. The information is assumed to be the last name. If you have "Cher" in your database, BKIndex will reference her as "Unknown Cher" in the index file.

Generate (and Index Order):

This command creates the index file. The number on screen indicates the ID number in FAMLFILE.DT4 that is being processed.
Names are rendered in the index as follows, depending on whether you choose REVERSE or NORMAL order:

William Ray Thorndike, born in 1906, ID number 27 will be listed as:

Thorndike, William Ray, b:1906, #27

or:

William Ray Thorndike, b:1906, #27

Females are always listed in their maiden name and all married names:

Laura May Jones, born in 1940, ID number 36, and married three times to spouses named Smith, Williams, and Jones will be listed (REVERSE) as:

Jones, Laura May, b:1906, #36   and

                Smith, Laura May [Jones], b:1906, #36   and
                Williams, Laura May [Jones], b:1906, #36 and
                Jones, Laura May [Jones], b:1906, #36

        or (NORMAL) as:

                Laura May Jones, b:1906, #36   and
                Laura May [Jones] Smith, b:1906, #36   and
                Laura May [Jones] Williams, b:1906, #36 and
                Laura May [Jones] Jones, b:1906, #36

Following the name will be a reference to the particular group sheets where pertinent information appears. Let's look at some examples:

        s:15, f:151, m:152, w:16, 201, 202

                This means there is a sheet for the person himself, indicated by the "s" under his ID #15, his father, #151, his mother, #152, who was married more than once, and for three of his wives, #16, #201, and #202 - who each had multiple marriages.

The abbreviations used are:

        s - self
        f - father
        m - mother (only if mother had multiple marriages)
        h - husband(s)
        w - wife or wives (only if wife had multiple marriages)

Most combinations are possible. BKIndex picks the most compact set of group sheets that covers the data, printing at least one sheet for each marriage (in the husband's name). Females are picked only if they have been married more than once.

Index (Print Index and Aspect Factor):

This command prints the file created by Generate to the screen or the printer. Each line of the file consists of a "name" field and a "reference field". Depending on whether you have long names in your family and/or frequent multiple marriages, you may want to change the balance of how much of the width of your report that you wish to allocate to these fields. Aspect factor controls this. Factors range between 1.25 and 5. The smallest factor allocates most of the space to the reference field, about five times as much as for the name field. The largest factor does just the reverse. Try different factors on screen before you print. A good balance is when the program does not skip lots of lines between names because either the name or the reference is too long to fit on the same number of lines as the other field. You can also regulate the amount of indent, the number of spaces between columns, and force one or two extra skipped lines between entries.

This command can be used to reprint a previously generated index, but it's safer to run Generate again to make sure things are current.

List (Print List of Group Sheets):

This command prints a list of all the group sheets that you will need to make your book. Note, this file exists only in memory after Generate is run. You can access this command as frequently as desired, but it only works after a Generate and the results refer to the last Generate you did. If you are working with multiple data sets, be sure you have run Generate with the correct data before printing the list of group sheets.

About Names:

Brother's Keeper allows you to enter up to 40 characters for the name including suffixes like Jr., Sr., III, etc. Names like "Van Dorn" or "De La Croix" are also acceptable. Brother's Keeper attempts to separate these out so that it can distinguish what is and is not part of the family name. BKIndex assumes that the last space in the name marks where the last name begins. I suggest that names be entered in the following format:

>   Albert James DeLaCroix   for   Albert James De La Croix
>   James Arthur (Sr.) Massey   for   James Arthur Massey Sr.
>   Egbert (Bud, III) Clark   for   Egbert (Bud) Clark III

This produces more logical sorts and insures that BKIndex can find the correct last name. Brother's Keeper does an admirable job, but gets tripped up once in a while when John is confronted with an unanticipated situation.

Brother's Keeper suggests using the name "*unknown" whenever you don't know the person's name. Each time you enter "*unknown" you create a new ID# just like if you knew the name. I prefer "Unknown Unknown". That is, I know who the person is, I just don't know their first or last name. These people don't appear in the index produced by BKIndex, but they may show up in the list of needed group sheets. This means that someone on their sheet is referenced in the index.

Printer Problems:

I tried to address the printer situation with as generic an approach as possible. By selecting the correct printer string you can access the full range of fonts, pitches, etc. that your printer supports. I did notice some odd results in Elite Pitch and finally realized that 12 characters per inch is 96 characters per line, but only columns 1 through 95 were acceptable to my printer. If you're getting odd results, try reducing the "columns per page" a little.

Technical Details:

The output file is a comma and quote delimited ASCII file. It can be imported into most spreadsheets, databases, and word processors. The file lines are usually longer than 80 characters, so you'll need to deal with field parsing.

Since this analysis is so i/o intensive, I tried to use RAM wherever possible rather than by writing additional files. There are two internal integer matrices that handle the "check" routine and the "list" of group sheets. I set these as large as Quick Basic would allow and still have the program compile. Brother's Keeper supposedly limits you to 15,000 names, so I support lists up to 15,000. "Check" only works up to 12,000. If you have very large files and this creates a problem, let me know and I can tailor a special version for you.

Credits:

Quick Basic is a registered trademark of Microsoft.

Brother's Keeper is copyrighted to John Steed, 6907 Childsdale Road, Rockford, MI 49341. Please send him the $40, I did.

SORTF is the effort of Vernon D. Buerg, 139 White Oak Circle, Petaluma, CA 94952, Data: (707) 778-8944, 24-hour BBS, CompuServe: 70007,1212. He'd like $15. I haven't sent him anything yet, but I intend to.

For what it's worth, both of these gentlemen have created excellent programs, as good or better than many commercial products. They have my highest praises and blessings. Thanks, guys.

<u>Rampant Capitalism:</u>

If you find BKIndex to be beneficial, please send $5 or whatever you can spare. Please let me know your name, address, and disk size requirements (5¼" or 3½", high or low density). I will try to alert everyone of future updates and provide them at my cost. Regardless of whether you contribute financially or not, I would appreciate your comments, questions, and criticisms. These will ultimately be used to improve BKIndex.

Please send contributions to:

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