FILE COMPARATOR   Copyright PDQL/Dillon

1.0 General

The Compare Program compares two files either on the same or on different volumes. Start up from reset with a copy of the supplied volume in drive 1. Alternatively ensure that the xtras file on the supplied volume is linked into SuperBASIC on your system and enter

        exec mdv1_compare_bin

or as appropriate. The program will compare your two selected files, working in sectors of 512 characters a time.

2.0 Initial Prompts

You are first required to identify the relevant device or devices and the names of the two files to be compared. The prompts and responses are: **device type of first file f/m/k/r/w/o:**

                for flp/mdv/fdk/ram/winchester/other.

If 'other' you will be required to specify such device. Press the appropriate letter.

Next: **device number of first file (1-6):**

Press the appropriate number.

Next: **name of first file:**

Type the full name (including any suffix) and ENTER.

Repeat for the second file.

Next: **from beginning of both files (y/n):**

ENTER or 'y' to confirm; 'n' to start one or other from a later position. If the response is 'n' you are asked to type a number for the first file + ENTER. The prompt being:

        start point of first file:

The number to be entered represents the number of characters from the file beginning. The procedure is identical for the second file. ENTER defaults to the beginning of the file.

3.0   The Program at Work

Each sector (of 512 characters) is displayed in the display panels, one above the other. The top banner displays the name of file, the length in character numbers and the start position of the current sector called to the screen.

The program suppresses the LINEFEED character in the display panels. Linefeed (ENTER) in the file data is visually converted to a sideways arrow.

The display mode defaults to 'character' showing 512 characters at a time from each file. The user may switch at any time to Decimal D (80 characters displayed) or Hex H (128 characters displayed), or back to Character mode C.

3.1   Colour Codes

Matching sequences are displayed green on black, mis-matches as white on red. Only sectors containing a mis-match are displayed. If there are no mis-matches the display panels will not change. The compare function can be seen to be operating by the change of sector start position numbering.

4.0   Mismatch

If there is a mismatch in the sectors currently being compared, the offending sectors are displayed and the program pauses for further instructions. You have a choice of continuing with the comparison, aligning a passage of text from one of the sectors with the other, repositioning one or both of the files, or quitting.

4.1   To Reposition

By depressing F2 you can reposition either file by as many characters as you know (ar guess) will be necessary to restore both files to the same (logical) place in the text. Your first choice is to reposition the top displayed file, forward by typing the number, backward by typing - (leading minus) followed by the number, and then ENTER. If the top file is to remain in the same position press ENTER. In either event you are now given the opportunity of repositioning the bottom displayed file using the same method.

4.2 To Align

By depressing F3 you can align one part of either of the displayed sectors with the other. A sliding double panel now appears below the display panels showing the first displayed line of each sector as set out in the display panels. Left and right arrows move through the sector of the top displayed file one character at a time. SHIFT and left or right arrows move through the sector one 'line' (63 characters - to allow a 1 character overlap) at a time. You cannot move out of the sector using the align command.

To move around the bottom displayed sector press ALT together with left/right arrows and/or SHIFT as before.

When the alignment is satisfactory, the user may continue the comparison by pressing ENTER. If you get in a mess, simply press ESC.

4.3 Partial Comparison

There is one further option on the method of comparison. If you know that you are comparing 'line oriented' files (e.g. text files such as Assembler source, SuperBASIC source, Editor files or whatever), you can tell the program to ignore any mis-matches occurring within 'n' characters of the start of the line.

This is particularly useful for comparing different versions of the same SuperBASIC program, where the introduction of only one line followed by a renumber would otherwise render the comparison tedious and considerably less effective. This 'ripple' effect on line numbers caused by the deletion or introduction of one or more lines can be avoided.

This mechanism is invoked by typing "I" - for Ignore. The following prompt will appear: "Ignore how many leading Chars per line: "

Type in any number you choose. The number will typically be between 0 and 5, but may be any positive integer or zero.

5.0 Other Information

The prompts available at any stage of the program operation are clearly
displayed. F1 as usual is the HELP button. ESC will leave the program
at any time. Redraw will refresh the screen if you have multi-tasking
capabilities and have temporarily left the program for another job.

6.0 Final Report

When the comparison is complete or the program aborted (by ESC) the
total number of character mismatches and characters scanned is
displayed.

7.0 The Supplied Program

The supplied program is written in SuperBASIC and compiled using TURBO
from Digital Precision.

The files on the supplied volume are:

    compare_doc
    boot
    compare_bin
    xtras

Reminder: the xtras file must be loaded and linked into the QL/THOR
before compare_bin is executed. The boot program ensures that this is
the case. If the TURBO Toolkit is available on the system in use, then
there is no need to load the supplied extensions.