NAME
compface, uncompface – compress and expand 48x48x1 face image files

SYNOPSIS
compface [*infile* [*outfile*]] ...

uncompface [-X] [*infile* [*outfile*]] ...

DESCRIPTION
compface is a filter for generating highly compressed representations of 48x48x1 face image files. *uncompface* is an inverse filter which performs an inverse transformation with no loss of data. The algorithm used is highly tuned for its purpose and achieves better than a five to one compression ratio on average. Arguments operate identically for both programmes. The first argument, if present, causes input to be taken from the named file instead of from standard input unless it is the string "-". A second argument, if present, causes output to go to the named file instead of to standard output unless it is the string "-". Subsequent pairs of arguments may be used to specify further pairs of input and output files.

The input format for *compface* (and the output format for *uncompface*) is 48 lines each of 3 sixteen bit hexadecimal integers, comma terminated in C initialiser style. The output format of *compface* (and the input format for *uncompface*) is some number of lines made up of a space followed by printable characters (in the range "!" to "~" inclusive). The first line contains 72 characters and following lines contain 79 characters except that the last line may be short.

If the -X option is given to uncompface, it generates XBM format directly.

The amount of compression obtained varies between face image files but the output of *compface* averages less than 200 characters. The average number of output lines is three.

DIAGNOSTICS
Exit status is normally 0. Possible errors include IO errors when opening, reading or writing files, format errors in *compface* input files and invalid arguments. Each results in an explanatory message on standard error and an exit status of 1. A warning will be produced if *compface* detects extra input data.

BUGS
Nominating standard input as input more than once does not work.

SEE ALSO
Compface(3)

NAME

    compface, uncompface – compress and expand 48x48x1 face image files

SYNOPSIS

    compface (buf)

    uncompface (buf)

    char *buf

DESCRIPTION

    compface is a function for generating highly compressed representations of 48x48x1 face image files. *uncompface* is an inverse function which performs an inverse transformation with no loss of data. The algorithm used is highly tuned for its purpose and achieves better than a five to one compression ratio on average. In both functions, input is via a NULL terminated string and a NULL terminated output string is written over the input string. *Buf* should therefore point to a block of 2K size or more to avoid buffer overruns during output generation.

    The input format for *compface* (and the output format for *uncompface*) is 48 lines each of 3 sixteen bit hexadecimal integers, comma terminated in C initialiser style. The output format of *compface* (and the input format for *uncompface*) is some number of lines made up of a space followed by printable characters (in the range "!" to "˜" inclusive). The first line contains 72 characters and following lines contain 79 characters except that the last line may be short.

    The amount of compression obtained varies between face image files but the output of *compface* averages less than 200 characters. The average number of output lines is three.

DIAGNOSTICS

    The return value is normally 0. 1 will be returned if extra input has been ignored during a compress operation. -1 is returned in the case of an invalid input format. -2 is returned if an internal buffer overrun occurs.

SEE ALSO

    Compface(1)