```
// Format matching text wave row to the history area
Grep/E=("Red")/DCOL={"prefix text --- ", 0, " --- suffix text"} textWave

// Printed output:
    prefix text --- BlueRedGreen --- suffix text
    prefix text --- RedWhiteBlue --- suffix text
    prefix text --- BlueRedGreen256 --- suffix text
    prefix text --- RedWhiteBlue256 --- suffix text
    prefix text --- Red --- suffix text
    prefix text --- RedWhiteGreen --- suffix text
    prefix text --- BlueBlackRed --- suffix text


// Re-copy rows of textWave that contain "Red" (case sensitive)
// to the Clipboard as carriage-return separated lines.
Grep/E="Red" textWave as "Clipboard"
// Create a 2-column text wave whose column 1 (the second column)
// contains the matching text from the Clipboard
Make/O/N=(0,2)/T outputTextWave
// Grep with /A to preserve 2 columns of outputTextWave
Grep/A/E="Red"/GCOL=1/DCOL={1} "Clipboard" as outputTextWave
Edit outputTextWave


// Examples with two-dimensional source text waves
Make/O/T/N=(10, 3) sourceTW= StringFromList(p+10*q,list)
Edit sourceTW


// Copy rows of textWave that contain "Red" in column 2 to outputTextWave.
Make/O/N=0/T outputTextWave
Grep/E="Red"/GCOL=2 sourceTW as outputTextWave
Edit outputTextWave


// Format matching text wave columns to the history area.
// Match lines that contain "Red" in any column of sourceTW:
Grep/E=("Red")/GCOL=-1/DCOL={0,", ",1,", ",2} sourceTW

// Printed output:
    YellowHot, BlueRedGreen256, Magenta
    BlueHot, RedWhiteBlue256, Yellow
    BlueRedGreen, PlanetEarth256, Copper
    RedWhiteBlue, Terrain256, Gold
    Terrain, Rainbow16, RedWhiteGreen
    Grays256, Red, BlueBlackRed
```

References

The regular expression syntax supported by Grep, **GrepString**, and **GrepList** is based on the *PCRE — Perl-Compatible Regular Expression Library* by Philip Hazel, University of Cambridge, Cambridge, England. The PCRE library is a set of functions that implement regular expression pattern matching using the same syntax and semantics as Perl 5.

Visit <http://pcre.org/> for more information about the PCRE library.

A good book on regular expressions is: Friedl, Jeffrey E. F., *Mastering Regular Expressions*, 2nd ed., 492 pp., O'Reilly Media, 2002.

A helpful web site is: http://www.regular-expressions.info

See Also

Regular Expressions on page IV-176 and **Symbolic Paths** on page II-22.

Demo, **CopyFile**, **PutScrapText**, **LoadWave** operations. The **GrepString**, **GrepList**, **StringMatch**, and **CmpStr** functions.

GrepList

GrepList(*listStr*, *regExprStr* [,*reverse* [, *listSepStr*]])

The GrepList function returns each list item in *listStr* that matches the regular expression *regExprStr*.

ListStr should contain items separated by *listSepStr* which typically is ";".

regExprStr is a regular expression such as is used by the UNIX grep(1) command. It is much more powerful than the wildcard syntax used for **ListMatch**. See **Regular Expressions** on page IV-176 for *regExprStr* details.