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Subject: string manipulation

Posted by [Craig Markwardt](#) on Mon, 26 Feb 2001 22:34:47 GMT

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I have been thinking about the following problem, but have been pretty frustrated.

I have input keyword/value strings of the following form. People may recognize this from a FITS file.

```
TTYPE2 = 'X1LSpecPcu0'      / X1LSpecPcu0 : Histogram
TUNIT2 = 'count '
1CTYP2 = 'CHANNEL '
1CPIX2 = '0~4,5:53,(54~135;2),(136~237;3),(238~249;4),250~255'
12CD2A = 1.25
^name^^ ^value^^^^^^
```

All of the keyword names have a trailing "2" which indicates that they are describing column number 2 in a FITS table. Note that in the name "12CD2A", only the *final* 2 refers to the column number.

The interesting question happens when I want to change the column number, say from "2" to "50". Is there a straightforward way to do this in "vectoral" sort of way?

I am able to find the string positions of the 2's, so that's not really a problem. I do this by making a byte array of the strings, and blanking out any alphabetic characters and any leading numeric characters. Here I appreciate STRPOS is (partially) vectorized.

However, when it comes to resubstituting the "50" back in, that's when I get stymied. This is primarily because STRMID and STRPUT are not vectorized at all. Well STRMID *is* vectorized, but not with a sane behavior. For example, what I'd like to do is:

```
NEWKEY = STRMID(KEY,0,P1) + '50' + STRMID(KEY,P2,100)
```

Where KEY, P1, and P2 are vectors. Obviously this doesn't work. Any ideas?

Craig

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Craig B. Markwardt, Ph.D.      EMAIL: [craigmnet@cow.physics.wisc.edu](mailto:craigmnet@cow.physics.wisc.edu)  
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