Why is the column moved to the end of the table when I try to update it in place?

Columns that existed in the input file that are modified in the output file are treated like new columns by dmtcalc and new columns are added by default at the end of the file. For example:

```
unix% dmlist input.fits cols
...
  10   energy              eV          Real4        0:  1000000.0         nominal energy of event
  11   pi                  chan        Int4         1:1024               pulse invariant energy
  12   fltgrade                        Int2         0:255                event grade, flight sys
  13   grade                           Int2         0:7                  binned event grade
  14   status[4]                       Bit(4)                            event status bits
...

unix% dmtcalc infile="input.fits" outfile="output.fits" expression="energy=((float)pha)*0.1"

unix% dmlist output.fits cols
...
  10   pi                  chan        Int4         1:1024               pulse invariant energy
  11   fltgrade                        Int2         0:255                event grade, flight sys
  12   grade                           Int2         0:7                  binned event grade
  13   status[4]                       Bit(4)                            event status bits
  14   ENERGY                          Real8        -Inf:+Inf            User defined column
...
```

The name of the energy column in the output file is in upper case (no matter what its case is in the input file) since its values have been changed.

If you would like to reorder the columns after running the tool, dmcopy the file with a list of columns in the desired order (note that this method will only copy the specified columns):

```
unix% dmcopy "output.fits[cols time,pha,energy,pi]" reordered.fits

unix% dmlist reordered.fits cols

--------------------------------------------------------------------------------
Columns for Table Block EVENTS
--------------------------------------------------------------------------------

ColNo  Name              Unit        Type          Range
   1   time              s           Real8         84244214.7546979934: 84253882.0425609946 S/C
   2   pha               adu         Int4          0:36855              total pulse height of e
   3   ENERGY                        Real8         -Inf:+Inf            User defined column
   4   pi                chan        Int4          1:1024               pulse invariant energy
```

although FITS files and the software that reads them generally are not supposed to care about the order of the columns.