How to migrate catalogues from ASCII to FITS format

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Q: How to convert an ascii file (table) to a fits file?

A: You can perform the following steps:

1. Create a comma separated ascii table. For example if the table (cat1.txt) has $n$ columns separated by white spaces:

   ```bash
   awk '{print $1,,"$2,,"$3,,"$...,,,"$n-1,,"$n}' cat1.txt > cat2.txt
   ```

2. Convert the new table (cat2.txt) into a fits file using the `stilts` tool:

   ```bash
   stilts tcopy cat2.txt cat.fits ifmt=csv ofmt=fits-basic
   ```

   Usage:

   ```bash
   stilts <stilts-flags> tcopy ifmt=<in-format> ofmt=<out-format> [in=]<table> [out=]<out-table>
   ```

3. Add the missing header keywords according to the ESO Science Data Products Standard.

The STIL Tool Set can be downloaded from:

[http://www.star.bris.ac.uk/~mbt/stilts/#install](http://www.star.bris.ac.uk/~mbt/stilts/#install)

For more information please check the following documentation:

[http://www.star.bris.ac.uk/~mbt/stilts/](http://www.star.bris.ac.uk/~mbt/stilts/)
[http://www.star.bris.ac.uk/~mbt/stilts/sun256/tcopy.html](http://www.star.bris.ac.uk/~mbt/stilts/sun256/tcopy.html)