NAME

csv - process data in a CSV (Comma-Separated Values) file.

SYNOPSIS

csv [-frh] [-max field] [-min field] [-mean field] [-records field value] file

DESCRIPTION

The **csv** program reads data from a CSV file (**file**), processes the contents and produces results according to command-line arguments, as follows.

-f Display the number of fields in the first record of **file**.

-r Display the number of records in **file**.

-h Treat the first record of **file** as a header record rather than a data record.

-max field Display the maximum value in the indicated **field** of the data records. The first field is numbered 0. This option ignores non-numeric data in the indicated field. If there is no numeric data in the indicated field in any of the data records the program exits with error code 1.

-min field Display the minimum value in the indicated **field** of the data records. The first field is numbered 0. This option ignores non-numeric data in the indicated field. If there is no numeric data in the indicated field in any of the data records the program exits with error code 1.

-mean field Display the arithmetic mean (average) value in the indicated **field** of the data records. The first field is numbered 0. This option ignores non-numeric data in the indicated field. If there is no numeric data in the indicated field in any of the data records the program exits with error code 1.

-records field value Display the records from **file** containing **value** in the the indicated **field**. The first field is numbered 0. Value is formatted according to the same rules as data in fields.

EXAMPLES

These examples are based on the following sample file. In compliance with stated requirements this file is also available from the original source as Television viewing time of all television stations, by viewer demographic characteristics, content and type of programme, Canada, published by Statistics Canada under the Open Government License - Canada.

Assume that '%' is the operating system prompt.

```
% csv -f 05020004-eng.csv
8
% csv -r 05020004-eng.csv
820
% csv -h -min "Ref_Date" 05020004-eng.csv
1998
% csv -h -max "Ref_Date" 05020004-eng.csv
2004
% csv -h -mean "Value" 05020004-eng.csv
10.26
% csv -h -min "Ref_Date" -max "Ref_Date" -mean "Value" 05020004-eng.csv
1998
2004
10.26
% csv -h -records "Value" 61.1 05020004-eng.csv
1998,Canada,"Total, all persons two years and older",Foreign television
programmes,"Total, all types of television programmes",v21419952,1.1.3.1,61.1
2001,Canada,"Total, all persons two years and older",Foreign television
programmes,"Total, all types of television programmes",v21419952,1.1.3.1,61.1
```

EXIT STATUS

0 if execution terminates normally

1 if execution terminates abnormally

STANDARDS

The input file is expected to adhere to the rfc4180 standard for CSV files. This file is available on-line at https://www.ietf.org/rfc/rfc4180.txt