NAME

factor, primes - factor a number, generate primes

SYNOPSIS

factor [-h] [number ...]
primes [-h] [start [stop]]

DESCRIPTION

The **factor** utility will factor positive integers. When a number is factored, it is printed, followed by a ':', and the list of factors on a single line. Factors are listed in ascending order, and are preceded by a space. If a factor divides a value more than once, it will be printed more than once.

When **factor** is invoked with one or more arguments, each argument will be factored.

When **factor** is invoked with no arguments, **factor** reads numbers, one per line, from standard input until end of file or 0 is entered or an error occurs. Leading white-space and empty lines are ignored.

Numbers may be preceded by a single '+'. Numbers can be either decimal or hexadecimal strings where the longest leading substring is used. Numbers are terminated by a non-digit character (such as a newline). If the string contains only decimal digits, it is treated as a decimal representation for a number. A hexadecimal string can contain an optional Ox or OX prefix. After a number is read, it is factored.

The **primes** utility prints primes in ascending order, one per line, starting at or above *start* and continuing until, but not including *stop*. The *start* value must be at least 0 and not greater than *stop*. The *stop* value must not be greater than the maximum. The default and maximum value of *stop* is 18446744073709551615.

When the **primes** utility is invoked with no arguments, *start* is read from standard input and *stop* is taken to be the maximum. The *start* value may be preceded by a single '+'. The *start* value is terminated by a non-digit character (such as a newline).

DIAGNOSTICS

negative numbers aren't permitted illegal numeric format start value must be less than stop value Result too large

BUGS

factor cannot handle the "10 most wanted" factor list, primes will not get you a world record.