

**NAME**

shasum - Print or Check SHA Checksums

**SYNOPSIS**

Usage: shasum [OPTION]... [FILE]...

Print or check SHA checksums.

With no FILE, or when FILE is -, read standard input.

- a, --algorithm 1 (default), 224, 256, 384, 512, 512224, 512256
- b, --binary read in binary mode
- c, --check read SHA sums from the FILEs and check them
  - tag create a BSD-style checksum
- t, --text read in text mode (default)
- U, --UNIVERSAL read in Universal Newlines mode
  - produces same digest on Windows/Unix/Mac
- 0, --01 read in BITS mode
  - ASCII '0' interpreted as 0-bit,
  - ASCII '1' interpreted as 1-bit,
  - all other characters ignored

The following five options are useful only when verifying checksums:

- ignore-missing don't fail or report status for missing files
- q, --quiet don't print OK for each successfully verified file
- s, --status don't output anything, status code shows success
  - strict exit non-zero for improperly formatted checksum lines
- w, --warn warn about improperly formatted checksum lines
  
- h, --help display this help and exit
- v, --version output version information and exit

When verifying SHA-512/224 or SHA-512/256 checksums, indicate the algorithm explicitly using the -a option, e.g.

```
shasum -a 512224 -c checksumfile
```

The sums are computed as described in FIPS PUB 180-4. When checking, the input should be a former output of this program. The default mode is to print a line with checksum, a character indicating type ('\*' for binary, ' ' for text, 'U' for UNIVERSAL, '^' for BITS), and name for each FILE. The line starts with a '\ ' character if the

FILE name contains either newlines or backslashes, which are then replaced by the two-character sequences ‘\n’ and ‘\\’ respectively.

Report shasum bugs to [mshelor@cpan.org](mailto:mshelor@cpan.org)

## DESCRIPTION

Running *shasum* is often the quickest way to compute SHA message digests. The user simply feeds data to the script through files or standard input, and then collects the results from standard output.

The following command shows how to compute digests for typical inputs such as the NIST test vector "abc":

```
perl -e "print qq(abc)" | shasum
```

Or, if you want to use SHA-256 instead of the default SHA-1, simply say:

```
perl -e "print qq(abc)" | shasum -a 256
```

Since *shasum* mimics the behavior of the combined GNU *sha1sum*, *sha224sum*, *sha256sum*, *sha384sum*, and *sha512sum* programs, you can install this script as a convenient drop-in replacement.

Unlike the GNU programs, *shasum* encompasses the full SHA standard by allowing partial-byte inputs. This is accomplished through the BITS option (*-0*). The following example computes the SHA-224 digest of the 7-bit message *0001100*:

```
perl -e "print qq(0001100)" | shasum -0 -a 224
```

## AUTHOR

Copyright (C) 2003-2018 Mark Shelor <[mshelor@cpan.org](mailto:mshelor@cpan.org)>.

## SEE ALSO

*shasum* is implemented using the Perl module `Digest::SHA`.