

**NAME**

basenc – Encode/decode data and print to standard output

**SYNOPSIS**

**basenc** [*OPTION*]... [*FILE*]

**DESCRIPTION**

basenc encode or decode FILE, or standard input, to standard output.

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

Mandatory arguments to long options are mandatory for short options too.

**--base64**

same as 'base64' program (RFC4648 section 4)

**--base64url**

file- and url-safe base64 (RFC4648 section 5)

**--base32**

same as 'base32' program (RFC4648 section 6)

**--base32hex**

extended hex alphabet base32 (RFC4648 section 7)

**--base16**

hex encoding (RFC4648 section 8)

**--base2msbf**

bit string with most significant bit (msb) first

**--base2lsbf**

bit string with least significant bit (lsb) first

**-d, --decode**

decode data

**-i, --ignore-garbage**

when decoding, ignore non-alphabet characters

**-w, --wrap=COLS**

wrap encoded lines after COLS character (default 76). Use 0 to disable line wrapping

**--z85** ascii85-like encoding (ZeroMQ spec:32/Z85); when encoding, input length must be a multiple of 4; when decoding, input length must be a multiple of 5

**--help** display this help and exit

**--version**

output version information and exit

When decoding, the input may contain newlines in addition to the bytes of the formal alphabet. Use **--ignore-garbage** to attempt to recover from any other non-alphabet bytes in the encoded stream.

**ENCODINGS EXAMPLES**

```
$ printf '\376\117\202' | basenc --base64
/k+C
```

```
$ printf '\376\117\202' | basenc --base64url
_k-C
```

```
$ printf '\376\117\202' | basenc --base32
7ZHYE===
```

```
$ printf '\376\117\202' | basenc --base32hex
VP7O4===
```

```
$ printf '\376\117\202' | basenc --base16  
FE4F82
```

```
$ printf '\376\117\202' | basenc --base2lsbf  
011111111111001001000001
```

```
$ printf '\376\117\202' | basenc --base2msbf  
11111100100111110000010
```

```
$ printf '\376\117\202\000' | basenc --z85  
@.FaC
```

**AUTHOR**

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**REPORTING BUGS**

GNU coreutils online help: <<https://www.gnu.org/software/coreutils/>>

Report any translation bugs to <<https://translationproject.org/team/>>

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**SEE ALSO**

Full documentation <<https://www.gnu.org/software/coreutils/basenc>>  
or available locally via: info '(coreutils) basenc invocation'