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# hex







package


standard library

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## Details

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 Documentation 

## <> Documentation

### Overview

Package hex implements hexadecimal encoding and decoding.

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## Constants

This section is empty.

## Variables

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```
var ErrLength = errors.New("encoding/hex: odd length hex string")
```

ErrLength reports an attempt to decode an odd-length input using Decode or DecodeString. The stream-based Decoder returns io.ErrUnexpectedEOF instead of ErrLength.

## Functions

### func Decode

```
func Decode(dst, src []byte) (int, error)
```

Decode decodes src into DecodedLen(len(src)) bytes, returning the actual number of bytes written to dst.

Decode expects that src contains only hexadecimal characters and that src has even length. If the input is malformed, Decode returns the number of bytes decoded before the error.

► [Example](#)

### func DecodeString

```
func DecodeString(s string) ([]byte, error)
```

DecodeString returns the bytes represented by the hexadecimal string s.

DecodeString expects that src contains only hexadecimal characters and that src has even length. If the input is malformed, DecodeString returns the bytes decoded before the error.

► [Example](#)

### func DecodedLen

```
func DecodedLen(x int) int
```

DecodedLen returns the length of a decoding of x source bytes. Specifically, it returns  $x / 2$ .

### func Dump

```
func Dump(data []byte) string
```

Dump returns a string that contains a hex dump of the given data. The format of the hex dump matches the output of ``hexdump -C`` on the command line.

► [Example](#)

## func Dumper

```
func Dumper(w io.Writer) io.WriteCloser
```

Dumper returns a WriteCloser that writes a hex dump of all written data to w. The format of the dump matches the output of ``hexdump -C`` on the command line.

► [Example](#)

## func Encode

```
func Encode(dst, src []byte) int
```

Encode encodes src into EncodedLen(len(src)) bytes of dst. As a convenience, it returns the number of bytes written to dst, but this value is always EncodedLen(len(src)). Encode implements hexadecimal encoding.

► [Example](#)

## func EncodeToString

```
func EncodeToString(src []byte) string
```

EncodeToString returns the hexadecimal encoding of src.

► [Example](#)

## func EncodedLen

```
func EncodedLen(n int) int
```

EncodedLen returns the length of an encoding of n source bytes. Specifically, it returns  $n * 2$ .

## func NewDecoder

added in go1.10

```
func NewDecoder(r io.Reader) io.Reader
```

NewDecoder returns an `io.Reader` that decodes hexadecimal characters from `r`. NewDecoder expects that `r` contain only an even number of hexadecimal characters.

## func NewEncoder

added in go1.10

```
func NewEncoder(w io.Writer) io.Writer
```

NewEncoder returns an `io.Writer` that writes lowercase hexadecimal characters to `w`.

## Types

### type InvalidByteError

```
type InvalidByteError byte
```

InvalidByteError values describe errors resulting from an invalid byte in a hex string.

### func (InvalidByteError) Error

```
func (e InvalidByteError) Error() string
```



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