

# Base64

## Base64.Base64 — Module

Base64

Functionality for base-64 encoded strings and IO.

## Base64.Base64EncodePipe — Type

`Base64EncodePipe(ostream)`

Return a new write-only I/O stream, which converts any bytes written to it into base64-encoded ASCII bytes written to `ostream`. Calling `close` on the `Base64EncodePipe` stream is necessary to complete the encoding (but does not close `ostream`).

### Examples

```
julia> io = IOBuffer();

julia> iob64_encode = Base64EncodePipe(io);

julia> write(iob64_encode, "Hello!")
6

julia> close(iob64_encode);

julia> str = String(take!(io))
"SGVsbG8h"

julia> String(base64decode(str))
"Hello!"
```

## Base64.base64encode — Function

```
base64encode(writefunc, args...; context=nothing)
base64encode(args...; context=nothing)
```

Given a [write](#)-like function `writefunc`, which takes an I/O stream as its first argument, `base64encode(writefunc, args...)` calls `writefunc` to write `args...` to a base64-encoded string, and returns the string. `base64encode(args...)` is equivalent to `base64encode(write, args...)`: it converts its arguments into bytes using the standard [write](#) functions and returns the base64-encoded string.

The optional keyword argument `context` can be set to `:key=>value` pair or an `IO` or [IOContext](#) object whose attributes are used for the I/O stream passed to `writefunc` or `write`.

See also [base64decode](#).

## Base64.Base64DecodePipe — Type

```
Base64DecodePipe(istream)
```

Return a new read-only I/O stream, which decodes base64-encoded data read from `istream`.

Examples

```
julia> io = IOBuffer();

julia> iob64_decode = Base64DecodePipe(io);

julia> write(io, "SGVsbG8h")
8

julia> seekstart(io);

julia> String(read(iob64_decode))
"Hello!"
```

## Base64.base64decode — Function

```
base64decode(string)
```

Decode the base64-encoded `string` and returns a `Vector{UInt8}` of the decoded bytes.

See also [base64encode](#).

### Examples

```
julia> b = base64decode("SGVsbG8h")
6-element Array{UInt8,1}:
 0x48
 0x65
 0x6c
 0x6c
 0x6f
 0x21

julia> String(b)
"Hello!"
```

### [Base64.stringmime](#) — Function

```
stringmime(mime, x; context=nothing)
```

Returns an `AbstractString` containing the representation of `x` in the requested mime type. This is similar to [repr\(mime, x\)](#) except that binary data is base64-encoded as an ASCII string.

The optional keyword argument `context` can be set to `:key=>value` pair or an `I/O` or [IOContext](#) object whose attributes are used for the I/O stream passed to [show](#).