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A Library for ANSI Common Lisp

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Chapter 1

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The `IncHash` function will increment the value in *key* of the *hash*, initializing it to 1 if it isn't currently defined.

4.1.2 The DecHash Function

The `DecHash` function will decrement the value in *key* of the *hash*, initializing it to -1 if it isn't currently defined.

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5.2.1 The Bit? Function

5.2.2 The Choose Function

The *Choose* function computes the binomial coefficient for n and k , typically spoken as n choose k , and usually written mathematically as $\binom{n}{k}$.

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The *Factorial* function computes $n!$ for positive integers. NB, this isn't intelligent, and uses a loop instead of better approaches.

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The String Package

The `String` package contains useful tools for working with strings.

10.1 Functions

10.1.1 The Character-Range Function

The `character-range` function returns a list of characters from the *start* to the *end* character. Note that this is returning a list, not a string.

Syntax

`(character-range start end) \implies '(start ... end)`

Arguments and Values

Start The character to start the range with, inclusive.

End The character to end the range with, inclusive.

Examples

```
(character-range #\a #\e)  $\implies$  '(#\a #\b #\c #\d #\e)
(character-range #\e #\a)  $\implies$  '(#\a #\b #\c #\d #\e)
```

10.1.2 The Character-Ranges Function

The `character-ranges` function is a convenience wrapper for `character-range` function, concatenating several calls and making the resultant list contain only unique instances.

Syntax

`(character-ranges start1 end1 ... \Longrightarrow '(character1 ...)`

Arguments and Values

Start_n The character to start the nth range with, inclusive.

End_n The character to end the nth range with, inclusive.

Examples

`(character-ranges #\a #\c #\x #\z) \Longrightarrow '(#\a #\b #\c #\x #\y #\z)`
`(character-ranges #\a #\c #\a #\c) \Longrightarrow '(#\a #\b #\c)`

10.1.3 The Escape-Tildes Function**10.1.4 The Replace-Char Function****10.1.5 The StrCat Function****10.1.6 The StrMult Function****10.1.7 The String-Join Function****10.1.8 The Stringify Function****10.1.9 The To-String Function****10.2 Methods****10.2.1 The Split Methods**

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