

Package: hashids (via r-universe)

September 4, 2024

Title Generate Short Unique YouTube-Like IDs (Hashes) from Integers

Version 0.9.0.9000

Description An R port of the hashids library. hashids generates YouTube-like hashes from integers or vector of integers. Hashes generated from integers are relatively short, unique and non-sequential. hashids can be used to generate unique ids for URLs and hide database row numbers from the user. By default hashids will avoid generating common English cursewords by preventing certain letters being next to each other. hashids are not one-way: it is easy to encode an integer to a hashid and decode a hashid back into an integer.

URL <https://github.com/ALShum/hashids-r/>, <http://hashids.org>

BugReports <https://github.com/ALShum/hashids-r/issues>

Depends R (>= 3.2.2)

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LazyData true

Suggests testthat

Repository <https://alshum.r-universe.dev>

RemoteUrl <https://github.com/alshum/hashids-r>

RemoteRef HEAD

RemoteSha c696e0c0881dfbc2de03c786516294fbb142b7a9

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ascii_val *Calculate the ascii value number of a character*

Description

Calculate the ascii value number of a character

Usage

```
ascii_val(char)
```

Arguments

char character

Value

ascii value integer

base16_to_dec *Converts a base 16 string to a base 10 number. Because I couldn't get base R functions to work for big hex numbers.*

Description

Converts a base 16 string to a base 10 number. Because I couldn't get base R functions to work for big hex numbers.

Usage

```
base16_to_dec(str_16)
```

Arguments

str_16 base 16 number as a string.

Value

base 10 integer.

decode	<i>Decodes a hashid into the original integer or integer vector</i>
--------	---------------------------------------------------------------------

Description

Decodes a hashid into the original integer or integer vector

Usage

```
decode(hash_str, settings)
```

Arguments

hash_str	hashid string to decode into integer or integer vector
settings	Settings list generated by hashid_settings

Value

integer or integer vector

decode_hex	<i>Decodes a hashid into the original hexadecimal number</i>
------------	--------------------------------------------------------------

Description

Decodes a hashid into the original hexadecimal number

Usage

```
decode_hex(hashid, settings)
```

Arguments

hashid	hashid to decode
settings	Settings list generated by hashid_settings

Value

hexadecimal number as a string

dec_to_base16	<i>Converts a base 10 number to base 16 number. Because I couldn't get R's as.hexmode() to work for big integers.</i>
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Description

Converts a base 10 number to base 16 number. Because I couldn't get R's as.hexmode() to work for big integers.

Usage

```
dec_to_base16(dec)
```

Arguments

dec	base 10 integer
-----	-----------------

Value

base 16 number as a string

encode	<i>Encodes an integer or integer vector into a hashid string. All numbers must be non-negative integers.</i>
--------	--------------------------------------------------------------------------------------------------------------

Description

Encodes an integer or integer vector into a hashid string. All numbers must be non-negative integers.

Usage

```
encode(int, settings)
```

Arguments

int	Integer or integer vector to encode
settings	Settings list generated by hashid_settings

Value

hashid string

encode_hex	<i>Encodes a hexadecimal number into a hashid</i>
------------	---------------------------------------------------

Description

Encodes a hexadecimal number into a hashid

Usage

```
encode_hex(hex_str, settings)
```

Arguments

hex_str	Hexadecimal number as string
settings	Settings list generated by hashid_settings

Value

hashid string

enforce_min_length	<i>Enforces hashid minimum length by padding the hashid with additional characters.</i>
--------------------	-----------------------------------------------------------------------------------------

Description

Enforces hashid minimum length by padding the hashid with additional characters.

Usage

```
enforce_min_length(encoded, min_length, alphabet, guards, values_hash)
```

Arguments

encoded	encoded hashid
min_length	minimum length required for hashid
alphabet	set of letters used to generate hashid
guards	set of guards used to generate hashid
values_hash	value hashed used to select guard characters

Value

hashid with padded characters to insure minimum length

hash	<i>Maps an integer to a string. Generated string will be inversely proportional to alphabet length.</i>
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Description

Maps an integer to a string. Generated string will be inversely proportional to alphabet length.

Usage

```
hash(number, alphabet)
```

Arguments

number	Integer to hash
alphabet	Possible letters for string.

Value

hashed string

hashid_defaults	<i>Default Values for hashid settings</i>
-----------------	-------------------------------------------

Description

Default alphabet, separators, and ratio of character separators and guards for hashid

Usage

```
DEFAULT_ALPHABET
```

```
DEFAULT_SEPS
```

```
RATIO_SEPARATORS
```

```
RATIO_GUARDS
```

Format

```
chr "abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ1234567890"
```

Source

<http://www.hashids.org>

hashid_settings	<i>A function to create a hashid settings list.</i>
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Description

A function to create a hashid settings list.

Usage

```
hashid_settings(salt, min_length = 0, alphabet = DEFAULT_ALPHABET,  
               sep = DEFAULT_SEPS)
```

Arguments

salt	An additional string to make hashids more unique.
min_length	Minimum length for hashid.
alphabet	String of characters for hashid.
sep	String of characters to use as separators.

Value

A list of parameters used in encoding and decoding.

shuffle	<i>Permutes the characters in a string based on an inputted salt string.</i>
---------	------------------------------------------------------------------------------

Description

Permutes the characters in a string based on an inputted salt string.

Usage

```
shuffle(string, salt)
```

Arguments

string	String to be permuted
salt	cryptograph salt string that is used to permute strings

Value

shuffled string

split	<i>Splits a string based on a set of splitting characters</i>
-------	---------------------------------------------------------------

Description

Splits a string based on a set of splitting characters

Usage

```
split(string, splitters)
```

Arguments

string	String to split
splitters	set of splitting characters as a string

Value

split vector of characters

unhash	<i>Unhashes a string to an integer based on alphabet.</i>
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Description

Unhashes a string to an integer based on alphabet.

Usage

```
unhash(hash, alphabet)
```

Arguments

hashed	String to unhash
alphabet	Set of letters used for hashing

Value

Unhashed integer

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