

Finite Bags API

(empty) \rightarrow FiniteBags

Returns a new empty FiniteBags

(cardinality t) \rightarrow integer

t: FiniteBags

Returns the number of items within a FiniteBags, including duplicates

(member t item) \rightarrow boolean

t: FiniteBags

item: I

Determines if elt is in t.

(counter t item) \rightarrow number

t: FiniteBags

item: I

Returns the number of times elt has occurred in t

(add t item) \rightarrow FiniteBags

t: FiniteBags

item: I

Returns a FiniteBags with the item appearing in the FiniteBags 1 more time than it did previously.

(add t item num) \rightarrow FiniteBags

t: FiniteBags

item: I

num: a number

Returns a FiniteBags with the item appearing in the FiniteBags num more times than it did previously.

$(\text{remove } t \text{ item}) \rightarrow \text{FiniteBags}$

t: FiniteBags

item: I

Returns a FiniteBags with the item appearing in the FiniteBags one less time that it did previously.

$(\text{remove } t \text{ item num}) \rightarrow \text{FiniteBags}$

t: FiniteBags

item: I

num: a number

Returns a FiniteBags with the item appearing in the FiniteBags num less times that it did previously.

$(\text{removeAll } t \text{ item}) \rightarrow \text{FiniteBags}$

t: FiniteBags

item: I

Returns a FiniteBags without the item appearing in the FiniteBags

$(\text{union } t \text{ u}) \rightarrow \text{FiniteBags}$

t: FiniteBags

u: FiniteBags

Returns a FiniteBags with all of the elements of t and u with the combined amounts of those elements in it.

$(\text{inter } t \ u) \rightarrow \text{FiniteBags}$

t: FiniteBags

u: FiniteBags

Returns a FiniteBags that has only items that appear in t and u.

$(\text{differ } t \ u) \rightarrow \text{FiniteBags}$

t: FiniteBags

u: FiniteBags

Returns a FiniteBags that only has the items that t and u do not have in common.

$(\text{Equal } t \ u) \rightarrow \text{boolean}$

t: FiniteBags

u: FiniteBags

Determines if t and u have the same items and no items difference.

$(\text{Subset } t \ u) \rightarrow \text{boolean}$

t: FiniteBags

u: FiniteBags

Determines if all the elements in t are in u.