

Package ‘rbit’

October 14, 2022

Title Binary Indexed Tree

Version 1.0.0

Author Jialun Zhang, Zhilan Fan, Hang Zhang

Maintainer Jialun Zhang <reatank@foxmail.com>

Description A simple implementation of Binary Indexed Tree by R. The BinaryIndexedTree class supports construction of Binary Indexed Tree from a vector, update of a value in the vector and query for the sum of a interval of the vector.

License MIT + file LICENSE

LazyData true

Imports R6

Encoding UTF-8

RoxygenNote 6.0.1

NeedsCompilation no

Repository CRAN

Date/Publication 2018-07-22 13:50:03 UTC

R topics documented:

BinaryIndexedTree	1
Index	3

BinaryIndexedTree *A simple implementation of Binary Indexed Tree as an R6 class.*

Description

Methods:

- `new(init)` Initializes from a vector `init`.
- `update(location, new.val)` Replaces the item at `location` with `new.val`.
- `query(l, r)` Returns the sum of the interval `[l, r]`.
- `show.BIT ()` Returns the Binary Indexed Tree.
- `show.origin()` Returns the vector.

Usage

`BinaryIndexedTree`

Format

An object of class `R6ClassGenerator` of length 24.

Examples

```
tmp <- BinaryIndexedTree$new(c(2,3,2,5,1))
tmp$update(1,3)
tmp$query(1,5)
tmp$show.origin()
tmp$show.BIT()
```

Index

* **datasets**

BinaryIndexedTree, [1](#)

BinaryIndexedTree, [1](#)