

# Package ‘rbit’

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**Title** Binary Indexed Tree

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**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.

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**LazyData** true

**Imports** R6

**Encoding** UTF-8

**RoxygenNote** 6.0.1

**NeedsCompilation** no

**Repository** CRAN

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

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**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

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BinaryIndexedTree, [1](#)