

Arrays Operations in R

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Contents

Array Basics	1
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Array Basics

Go to the [RMD](#), [R](#), [PDF](#), or [HTML](#) version of this file. Go back to [fan's REconTools](#) Package, [R4Econ](#) Repository ([bookdown site](#)), or [Intro Stats with R](#) Repository.

Multidimensional Arrays

```
# Multidimensional Array
# 1 is r1c1t1, 1.5 in r2c1t1, 0 in r1c2t1, etc.
# Three dimensions, row first, column second, and tensor third
x <- array(c(1, 1.5, 0, 2, 0, 4, 0, 3), dim=c(2, 2, 2))
dim(x)
```

Generate 2 Dimensional Array

```
## [1] 2 2 2
print(x)

## , , 1
##
##      [,1] [,2]
## [1,]  1.0   0
## [2,]  1.5   2
##
## , , 2
##
##      [,1] [,2]
## [1,]    0   0
## [2,]    4   3
```

Array Slicing

Remove Elements of Array Select elements with direct indexing, or with head and tail functions. Get the first two elements of three elements array.

```
# Remove last element of array
vars.group.bydf <- c('23','dfa', 'wer')
vars.group.bydf[-length(vars.group.bydf)]
```

```
## [1] "23" "dfa"
# Use the head function to remove last element
head(vars.group.bydf, -1)
```

```
## [1] "23" "dfa"
head(vars.group.bydf, 2)
```

```
## [1] "23" "dfa"
```

Get last two elements of array.

```
# Remove first element of array
vars.group.bydf <- c('23','dfa', 'wer')
vars.group.bydf[2:length(vars.group.bydf)]
```

```
## [1] "dfa" "wer"
```

```
# Use Tail function
tail(vars.group.bydf, -1)
```

```
## [1] "dfa" "wer"
```

```
tail(vars.group.bydf, 2)
```

```
## [1] "dfa" "wer"
```

NA in Array

```
# Convert Inf and -Inf to NA
x <- c(1, -1, Inf, 10, -Inf)
na_if(na_if(x, -Inf), Inf)
```

Check if NA is in Array

```
## [1] 1 -1 NA 10 NA
```