

# Meshgrid Arrays in R

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### Array Basics

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

### Remove Elements of Array

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

### 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
```