Introduction to R Software

Sorting and Ordering

Shalabh

Department of Mathematics and Statistics

Indian Institute of Technology Kanpur

Sorting

sort function sorts the values of a vector in ascending order (by default) or descending order.

Syntax

```
sort(x, decreasing = FALSE, ..,)
sort(x, decreasing = FALSE, na.last = NA, ...)
```

x   Vector of values to be sorted

decreasing   Should the sort be increasing or decreasing

na.last   for controlling the treatment of NAs.
                   If TRUE, missing values in the data are put last;
                   if FALSE, they are put first;
                   if NA, they are removed.

Sorting

Example

```
> y <- c(8,5,7,6)
> y
[1] 8 5 7 6

> sort(y)
[1] 5 6 7 8


> sort(y, decreasing = TRUE)
[1] 8 7 6 5
```

Sorting

```
R R Console
> y <- c(8,5,7,6)
> y
[1] 8 5 7 6
> sort(y)
[1] 5 6 7 8
> sort(y, decreasing = TRUE)
[1] 8 7 6 5
```

Ordering

`order` **function sorts a variable according to the order of variable.**

Syntax

`order(x, decreasing = FALSE, ..,)`

`order(x, decreasing = FALSE, na.last = TRUE, ...)`

`x` **Vector of values to be sorted**

`decreasing` **Should the sort be increasing or decreasing**

`na.last` **for controlling the treatment of NAs.**
If TRUE, missing values in the data are put last;
if FALSE, they are put first;
if NA, they are removed.

Ordering

Example

```
> y <- c(8,5,7,6)
> y
[1] 8 5 7 6

> order(y)
[1] 2 4 3 1


> order(y, decreasing = TRUE)
[1] 1 3 4 2
```

Ordering

```
R Console
> y <- c(8,5,7,6)
> y
[1] 8 5 7 6
> order(y)
[1] 2 4 3 1
>
> order(y,decreasing = TRUE)
[1] 1 3 4 2
```