

## Basic graphs for a single vector

In this section we will look at some simple graph commands for vectors, that are part of the base R system. For fancier graphics, check out the ggPlot package<sup>1</sup>.

Here is some data, in what is known as a *named vector*:

```
x <- c(23, 14, 3, 50, -2)
names(x) <- c("Billy", "Joan", "Peter", "Melissa", "Betty")
x
```

A common graph for such data would be a *labeled dot plot*:

```
dotchart(x)
dotchart(sort(x))      # Ordered by size
```

Another would be a bar chart:

```
barplot(x)
barplot(sort(x))
```

If you are willing to use the lattice package<sup>2</sup>, you can use the commands `dotplot` and `barchart` instead.

For non-labeled data, we would typically build histograms or boxplots. The following command generates 500 normally distributed random values and uses those as `x`.

```
x <- rnorm(500)
hist(x)
boxplot(x)
```

You can also use `bwplot` instead of `boxplot`, if you use the lattice package.

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<sup>1</sup>[../morsels/ggplot.html](http://morsels/ggplot.html)

<sup>2</sup>[packagesAsToolboxes.html](http://packagesAsToolboxes.html)