```
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Version 1.6.1  (2002-11-01)

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Type 'contributors()' for more information.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for a HTML browser interface to help.
Type 'q()' to quit R.

[Previously saved workspace restored]

----------------------------------------------------------
TeXmacs interface. Use v() to insert current graphic into
TeXmacs buffer. Use q("yes") to quit and save.
----------------------------------------------------------
```

≻ $A \leftarrow \begin{pmatrix} 1 & 6 & 3 \\ 2 & 7 & 4 \\ 5 & 8 & 9 \\ 3 & 4 & 5 \end{pmatrix}$

≻ $A_{1:2,2:3}$

```
     [,1] [,2]
[1,]    6    3
[2,]    7    4
```

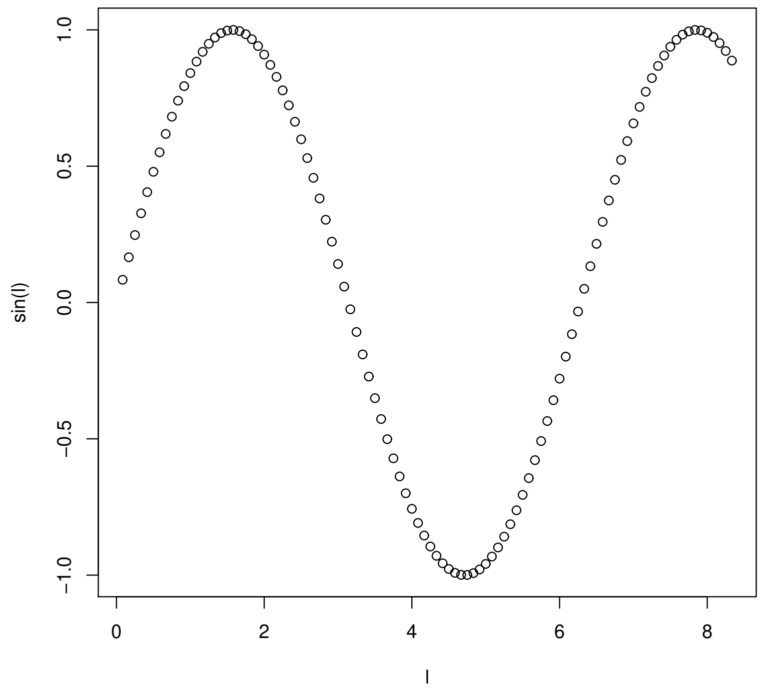
≻ $A_{1\ldots2,2\ldots3} \leftarrow \begin{pmatrix} 11 & 13 \\ 12 & 14 \end{pmatrix}$

≻ A

```
     [,1] [,2] [,3]
[1,]    1   11   13
[2,]    2   12   14
[3,]    5    8    9
[4,]    3    4    5
```

≻ $l \leftarrow \frac{1\ldots100}{12}$

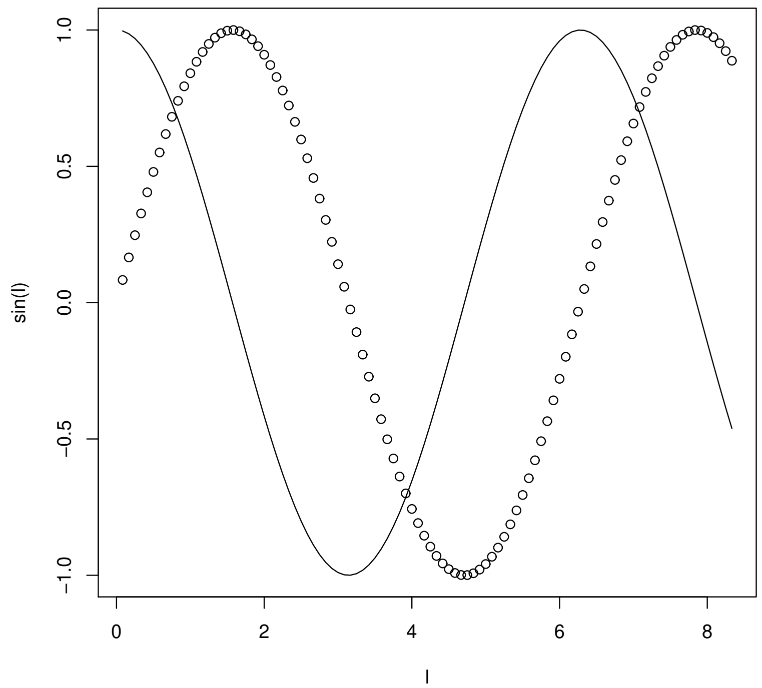
≻ $\mathrm{plot}(l, \sin(l)); v()$



X11

2

≻ $\mathrm{plot}(l, \sin(l)); \mathrm{lines}(l, \cos(l)); v()$



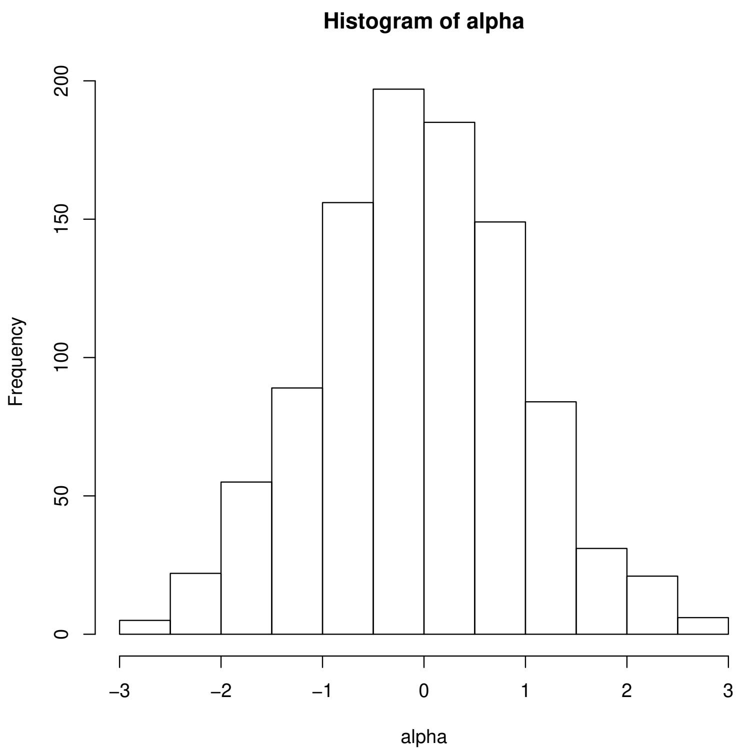
X11

2

$\succ$

And now outside. Let us use R a bit better...

Rcas] $\alpha \leftarrow \mathrm{rnorm}(1000)$
$\succ$ $\mathrm{hist}(\alpha); v()$



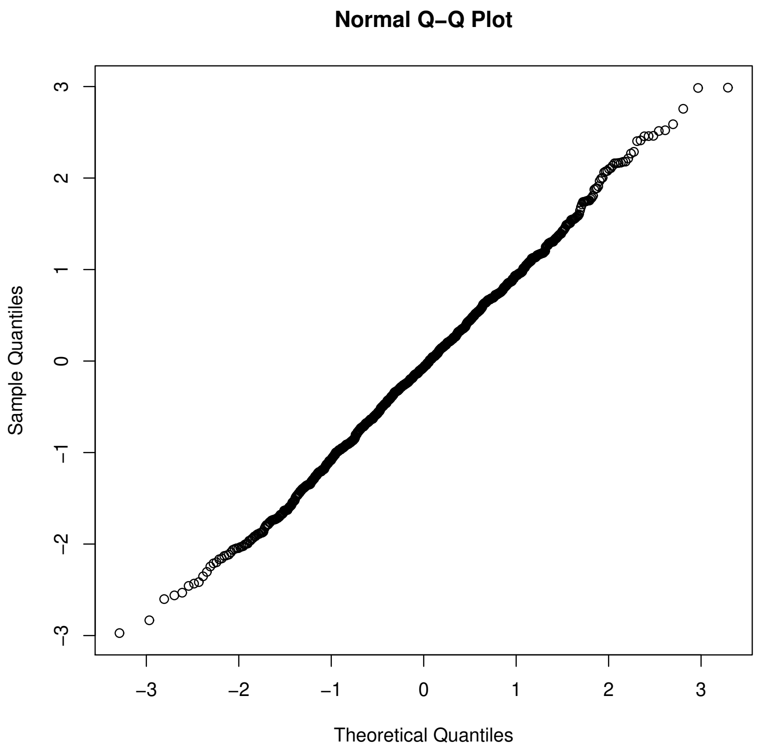
X11

2

≻ summary(alpha)

```
    Min.  1st Qu.   Median     Mean  3rd Qu.     Max.
-2.97300 -0.73060 -0.06853 -0.06120  0.63900  2.98800
```

≻ qqnorm(α); $v()$

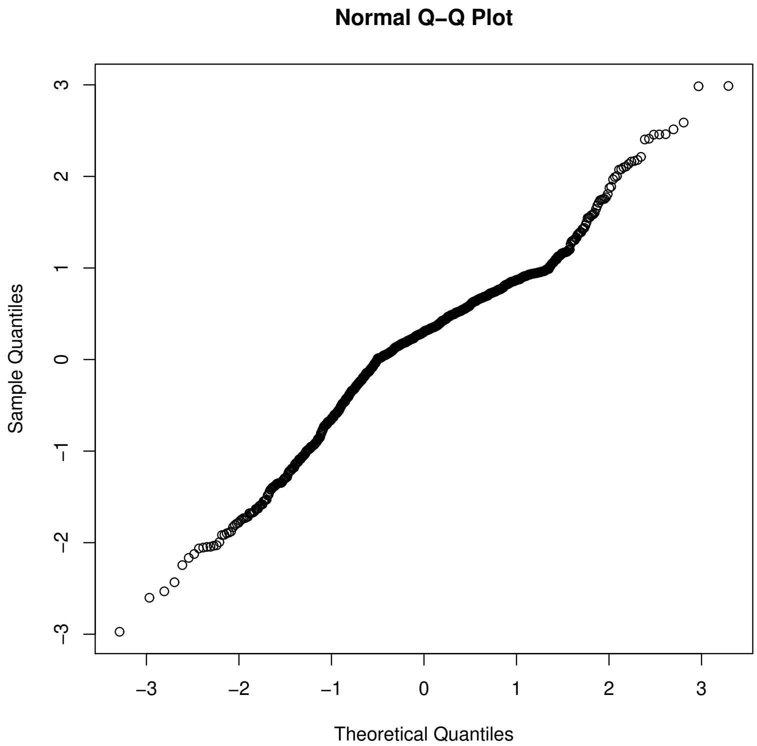


X11

2

Now we will skew this distribution somewhat

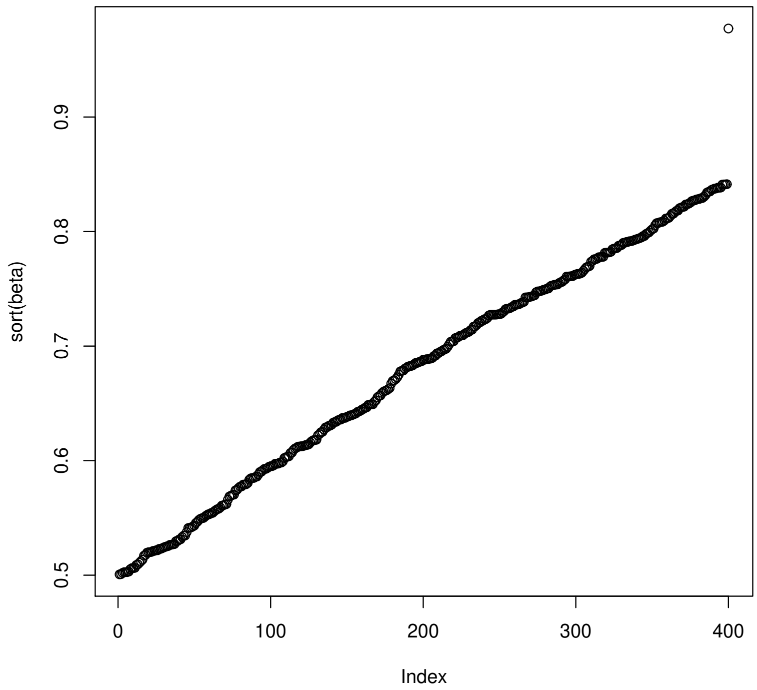
Rcas] $\alpha_{3...400} \leftarrow$ runif(398)
≻ qqnorm(α); $v()$



X11

2

≻ $\beta \leftarrow \mathrm{pnorm}(a)$
≻ $\mathrm{plot}(\mathrm{sort}(\beta)); v()$



X11

```
  2
```

≻ length(α)

```
[1] 1000
```

≻