

## %MktKey Macro

The %MktKey autocall macro creates expanded lists of variable names. See the following pages for examples of using this macro in the design chapter: 133 and 192. Also see the following pages for examples of using this macro in the discrete choice chapter: 356, 546, 556, 575, 607, 617, 628, and 636. Additional examples appear throughout this chapter. You can specify the number of rows followed by a number of columns. The output is a data set called KEY. This is illustrated in the following step:

```
%mktkey(5 10)
```

The KEY output data set with 5 rows and 10 columns and  $5 \times 10 = 50$  variable names, x1-x50 is as follows:

---

x1	x2	x3	x4	x5	x6	x7	x8	x9	x10
x1	x2	x3	x4	x5	x6	x7	x8	x9	x10
x11	x12	x13	x14	x15	x16	x17	x18	x19	x20
x21	x22	x23	x24	x25	x26	x27	x28	x29	x30
x31	x32	x33	x34	x35	x36	x37	x38	x39	x40
x41	x42	x43	x44	x45	x46	x47	x48	x49	x50

---

Alternatively, you can specify the number of rows and number of columns followed by a t or T and get the transpose of this data set. The output data set is again called KEY. The following step illustrates this option:

```
%mktkey(5 10 t)
```

The KEY output data set with 5 rows and 10 columns and  $5 \times 10 = 50$  variable names, x1-x50 is as follows:

---

x1	x2	x3	x4	x5	x6	x7	x8	x9	x10
x1	x6	x11	x16	x21	x26	x31	x36	x41	x46
x2	x7	x12	x17	x22	x27	x32	x37	x42	x47
x3	x8	x13	x18	x23	x28	x33	x38	x43	x48
x4	x9	x14	x19	x24	x29	x34	x39	x44	x49
x5	x10	x15	x20	x25	x30	x35	x40	x45	x50

---

Note that this time the names progress down the columns instead of across the rows.

The %MktKey macro has another type of syntax as well. You can provide the %MktKey macro with a list of variables as follows:

```
%mktkey(x1-x15)
```

The %MktKey macro produced the following line:

```
x1 x2 x3 x4 x5 x6 x7 x8 x9 x10 x11 x12 x13 x14 x15
```

You can copy and paste this list to make it easier to construct the `key=` data set for the %MktRoll macro. The following step makes the `Key` data set:

```
data key;
  input (x1-x5) ($);
  datalines;
x1 x2 x3 x4 x5
x6 x7 x8 x9 x10
x11 x12 x13 x14 x15
. . . . .
;
```

Alternatively, if you want to use precisely the `Key` data set that the %MktKey macro creates, you can have the %MktRoll macro automatically construct the `key=` data set for you by specifying the same argument in the `key=` option that you would specify in the %MktKey macro. In the sample code below, the first two steps are equivalent to the third step:

```
%mktkey(3 3)
%mktroll(design=design, key=key, out=rolled)

%mktroll(design=design, key=3 3, out=rolled)
```

## %MktKey Macro Options

The following option can be used with the %MktKey macro:

# MktKey Macro Options

Option	Description
<code>list</code>	(positional) variable list or n rows and n columns
	(positional) “help” or “?” displays syntax summary

You can specify either of the following to display the option names and simple examples of the macro syntax:

```
%mktkey(help)
%mktkey(?)
```

The only argument to the %MktKey macro is the `list`.

**list**

specifies the variable list or matrix size list. Note that the list is a positional parameter, hence it is not specified after a name and an equal sign. The list can be a variable list.

Alternatively, the list contains the number of rows followed by the number of columns, optionally followed by a **t** or **T** (for transpose). Without the **t** the names go **x1**, **x2**, **x3**, ..., across each row. With the **t** the names go **x1**, **x2**, **x3**, ..., down each column.