LaTeX::Table

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Abstract

LaTeX::Table is a Perl module that provides functionality for an intuitive and easy generation of LaTeX tables. It ships with some predefined good looking table styles. This module supports multipage tables via the `xtab` package and publication quality tables with the `booktabs` package. It also supports the `tabularx` and `tabulary` packages for nicer fixed-width tables. Furthermore, it supports the `colortbl` package for colored tables optimized for presentations.

Contents

List of Tables

Animal	Description	Price
Gnat	per gram	13.651
	each	0.012
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 1: `width`

1 Installation

You can install this software with the `cpan` command.

```
$ cpan LaTeX::Table
```

Alternatively, download LaTeX::Table directly from `http://search.cpan.org/dist/LaTeX-Table/` and install in manually:

```
$ tar xvfz LaTeX-Table-VERSION.tar.gz
$ perl Build.PL
$ ./Build test
$ ./Build install
```

2 Examples

2.1 Table width, tabular* environment

Table 1 demonstrates a fixed-width table in the `tabular*` environment. Here, the space between the columns is filled with spaces.

```
$table = LaTeX::Table->new(
    {   header  => $header,
        data    => $data,
        width   => '0.7\textwidth',
        label   => 'tbl:width',
        caption => '\texttt{width}',
    }
);
```

Character	Fullname	Voice
Homer	Homer Jay Simpson	Dan Castellaneta
Marge	Marjorie Simpson (ne Bouvier)	Julie Kavner
Bart	Bartholomew Jojo Simpson	Nancy Cartwright
Lisa	Elizabeth Marie Simpson	Yeardley Smith
Maggie	Margaret Simpson	Elizabeth Taylor, Nancy Cartwright, James Earl Jones,Yeardley Smith, Harry Shearer

Table 2: LaTeX paragraph column attribute.

2.2 Large Columns

The next example is a small table with two larger columns. LaTeX::Table automatically sets the column to p{5cm} when a cell in a column has more than 30 characters. LaTeX generates Table 2.

```
$table = LaTeX::Table->new(
    {   header   => $header,
        data     => $data,
        label    => 'tbl:paragraph',
        caption  => 'LaTeX paragraph column attribute.',
    }
);
```

2.2.1 tabularx

We can use the tabularx package to find better column widths than the default 5cm. See Table 3 for the results.

```
$table = LaTeX::Table->new(
    {   header            => $header,
        data              => $data,
        width             => '0.9\textwidth',
        width_environment => 'tabularx',
        label             => 'tbl:tabularx',
        caption           => '\texttt{width\_environment=tabularx}.',
    }
);
```

Character	Fullname	Voice
Homer	Homer Jay Simpson	Dan Castellaneta
Marge	Marjorie Simpson (ne Bouvier)	Julie Kavner
Bart	Bartholomew Jojo Simpson	Nancy Cartwright
Lisa	Elizabeth Marie Simpson	Yeardley Smith
Maggie	Margaret Simpson	Elizabeth Taylor, Nancy Cartwright, James Earl Jones,Yeardley Smith, Harry Shearer

Table 3: `width_environment=tabularx`.

Character	Fullname	Voice
Homer	Homer Jay Simpson	Dan Castellaneta
Marge	Marjorie Simpson (ne Bouvier)	Julie Kavner
Bart	Bartholomew Jojo Simpson	Nancy Cartwright
Lisa	Elizabeth Marie Simpson	Yeardley Smith
Maggie	Margaret Simpson	Elizabeth Taylor, Nancy Cartwright, James Earl Jones,Yeardley Smith, Harry Shearer

Table 4: `width_environment=tabulary`.

2.2.2 `tabulary`

A third option is to use the tabulary package. See Table 4.

```
$table = LaTeX::Table->new(
    {   header            => $header,
        data              => $data,
        width             => '0.9\textwidth',
        width_environment => 'tabulary',
        label             => 'tbl:tabulary',
        caption           => '\texttt{width\_environment=tabulary}.',
    }
);
```

2.3   Rotate tables

Table 5 demonstrates the `sideways` option. Requires the rotating package.

```
$table = LaTeX::Table->new(
    {   header   => $header,
        data     => $data,
        width    => '0.9\textwidth',
        width_environment
                 => 'tabularx',
        sideways => 1,
        label    => 'tbl:sideways',
        caption  => '\texttt{width\_environment=tabularx, sideways}.',
    }
);
```

2.4   Resize tables

In Tables 6 and 7, the `resizebox` option was used to get the desired width (and height in the second example). Requires the graphicx package.

```
$table = LaTeX::Table->new(
    {   header    => $header,
        data      => $data,
        resizebox => [ '0.6\textwidth' ],
        label     => 'tbl:resizebox1',
        caption   => '\texttt{resizebox}, Example 1',
    }
);

$table->set_resizebox([ '300pt', '120pt' ]);
```

2.5   Callback functions

Callback functions are an easy way of formatting the cells. Note that the prices for Gnat are rounded in the following tables.

```
my $table = LaTeX::Table->new(
      {
      filename    => 'prices.tex',
      maincaption => 'Price List',
```

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Character	Fullname	Voice
Homer	Homer Jay Simpson	Dan Castellaneta
Marge	Marjorie Simpson (ne Bouvier)	Julie Kavner
Bart	Bartholomew Jojo Simpson	Nancy Cartwright
Lisa	Elizabeth Marie Simpson	Yeardley Smith
Maggie	Margaret Simpson	Elizabeth Taylor, Nancy Cartwright, James Earl Jones,Yeardley Smith, Harry Shearer

Table 5: `width_environment=tabularx, sideways`.

Character	Fullname	Voice
Homer	Homer Jay Simpson	Dan Castellaneta
Marge	Marjorie Simpson (ne Bouvier)	Julie Kavner
Bart	Bartholomew Jojo Simpson	Nancy Cartwright
Lisa	Elizabeth Marie Simpson	Yeardley Smith
Maggie	Margaret Simpson	Elizabeth Taylor, Nancy Cartwright, James Earl Jones,Yeardley Smith, Harry Shearer

Table 6: `resizebox`, Example 1

Character	Fullname	Voice
Homer	Homer Jay Simpson	Dan Castellaneta
Marge	Marjorie Simpson (ne Bouvier)	Julie Kavner
Bart	Bartholomew Jojo Simpson	Nancy Cartwright
Lisa	Elizabeth Marie Simpson	Yeardley Smith
Maggie	Margaret Simpson	Elizabeth Taylor, Nancy Cartwright, James Earl Jones,Yeardley Smith, Harry Shearer

Table 7: `resizebox`, Example 2

Table 8: `caption_top`, Example 1

ITEM		
ANIMAL	**DESCRIPTION**	**PRICE**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

```
    caption    => 'Try our special offer today!',
    label      => 'tbl:prices',
    header     => $header,
    data       => $data,
    callback   => sub {
        my ($row, $col, $value, $is_header ) = @_;
        if ($col == 2 && $!is_header) {
            $value = format_price($value, 2, '');
        }
        return $value;
    },
});
```

2.6 Captions

2.6.1 Placement

Tables can be placed on top of the tables with `caption_top => 1`. See Table 8. Note that the standard LaTeX macros are optimized for bottom captions. Use something like

```
\usepackage[tableposition=top]{caption}
```

to fix the spacing. Alternatively, you could fix the spacing by yourself by providing your own command(s) (Table 9):

```
$table->set_caption_top(
  '\setlength{\abovecaptionskip}{0pt}' .
  '\setlength{\belowcaptionskip}{10pt}' .
  \caption'
);
```

Table 9: `caption_top`, Example 2

ITEM		
ANIMAL	**DESCRIPTION**	**PRICE**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

A		
	A	**B**
A	**B**	**C**
1	w	x
2	c	

Table 10: Multicolumns.

2.7 Multicolumns

If you want tables with vertical lines (are you sure?) you should use our shortcut to generate multicolumns. These shortcuts are not only much less typing work, but they also automatically add the vertical lines, see Table 10.

```
$header = [ [ 'A:3c'         ],
            [ 'A:2c',  'B'  ],
            ['A', 'B', 'C'   ], ];


$data   = [ [ '1', 'w', 'x' ],
            [ '2', 'c:2c'    ], ];


$table = LaTeX::Table->new(
    {   header   => $header,
        data     => $data,
        theme    => 'Dresden',
        label    => 'tbl:mc',
        caption  => 'Multicolumns.',
    }
);
```

Gnat	per gram	13.651
	each	0.012
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 11: Table without header.

Gnat	per gram	13.651
	each	0.012
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 12: `columns_like_header`, Example 1: A transposed table.

2.8 Headers

If you don't need headers, just leave them undefined (see Table 11). If you want that the first column looks like a header, you can define this with the `columns_like_header` option (Table 12 and Table 13). You can also rotate the header columns by 90 degrees (Table 14) with `header_sideways`. If you do not want to rotate all header cells, use a callback function instead (Table 15).

```
$table = LaTeX::Table->new(
    {
    data        => $data,
    label       => 'tbl:noheader',
    caption     => 'Table without header.',
});
```

2.9 CSV Files

For importing CSV files, we can use the CPAN module Text::CSV:

```
my $csv = Text::CSV->new(
    {   binary          => 1,
        sep_char        => q{,},
        allow_whitespace => 1
    }
);
```

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A		
A		B
A	B	C
Gnat	per gram	13.651
	each	0.012
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 13: `columns_like_header`, Example 2.

Time	Monday	Tuesday	Wednesday	Thursday	Friday
9.00					
10.00					
11.00					
12.00					

Table 14: `header_sideways, left`

Time	Monday	Tuesday	Wednesday	Thursday	Friday
9.00					
10.00					
11.00					
12.00					

Table 15: `callback, right`

```
open my $IN, '<', 'imdbtop40.dat';

my $line_number = 0;
while ( my $line = <$IN> ) {
    chomp $line;
    my $status = $csv->parse($line);
    if ( $line_number == 0 ) {
        $header = [ [ $csv->fields() ] ];
    }
    else {
        push @{$data}, [ $csv->fields() ];
    }
    $line_number++;
}
close $IN;

$table = LaTeX::Table->new(
    {   header       => $header,
        data         => $data,
        type         => 'xtab',
        tabletail    => q{},
        label        => 'tbl:xtab',
        caption      => '\texttt{type=xtab}',
        caption_top => 1,
    }
);
```

See Table 16, which uses the xtab package for spanning across multiple pages.

Table 16: `type=xtab`

Rank	Rating	Title	Year	Votes
1.	9.1	The Shawshank Redemption	1994	403610
2.	9.1	The Godfather	1972	338496
3.	9.0	The Godfather: Part II	1974	195253
4.	8.9	Buono, il brutto, il cattivo., Il	1966	117494
5.	8.9	The Dark Knight	2008	340243
6.	8.9	Pulp Fiction	1994	333085

Table 16: Continued from previous page

Rank	Rating	Title	Year	Votes
7.	8.8	Schindler's List	1993	220503
8.	8.8	One Flew Over the Cuckoo's Nest	1975	168842
9.	8.8	12 Angry Men	1957	84726
10.	8.8	Star Wars: Episode V - The Empire Strikes Back	1980	229894
11.	8.8	Casablanca	1942	139763
12.	8.8	Star Wars	1977	271586
13.	8.8	Shichinin no samurai	1954	79374
14.	8.8	The Lord of the Rings: The Return of the King	2003	294259
15.	8.7	Goodfellas	1990	182825
16.	8.7	Rear Window	1954	95538
17.	8.7	Cidade de Deus	2002	124546
18.	8.7	Raiders of the Lost Ark	1981	205298
19.	8.7	C'era una volta il West	1968	56185
20.	8.7	The Lord of the Rings: The Fellowship of the Ring	2001	322699
21.	8.7	The Usual Suspects	1994	221641
22.	8.7	Fight Club	1999	301078
23.	8.7	Psycho	1960	115936
24.	8.6	The Silence of the Lambs	1991	198677
25.	8.6	Sunset Blvd.	1950	42280
26.	8.6	Dr. Strangelove or: How I Learned to Stop Worrying and Love the Bomb	1964	131289
27.	8.6	Memento	2000	217339
28.	8.6	North by Northwest	1959	76221
29.	8.6	Citizen Kane	1941	117600
30.	8.6	The Matrix	1999	310491
31.	8.6	It's a Wonderful Life	1946	84643
32.	8.6	The Lord of the Rings: The Two Towers	2002	269196

Website	URL
Slashdot	`http://www.slashdot.org`
Perlmonks	`http://www.perlmonks.org`
Google	`http://www.google.com`

Table 17: `coldef_strategy`

Table 16: Continued from previous page

Rank	Rating	Title	Year	Votes
33.	8.6	Se7en	1995	220400
34.	8.6	Slumdog Millionaire	2008	50475
35.	8.5	Leon	1994	154149
36.	8.5	Apocalypse Now	1979	142659
37.	8.5	American Beauty	1999	241532
38.	8.5	Taxi Driver	1976	122785
39.	8.5	WALL-E	2008	114271
40.	8.5	Lawrence of Arabia	1962	66188

2.10 Automatic column definitions

We can easily provide regular expressions that define the alignment of columns. See Table 17.

```
$table = LaTeX::Table->new(
    {   header  => [ [ 'Website', 'URL' ] ],
        data    => [
            [ 'Slashdot',  'http://www.slashdot.org'  ],
            [ 'Perlmonks', 'http://www.perlmonks.org' ],
            [ 'Google',    'http://www.google.com'    ],
        ],
        coldef_strategy => {
            URL     => qr{ \A \s* http }xms,
            URL_COL => '>{\ttfamily}l',
        },
        label   => 'tbl:coldef_strategy',
        caption => '\texttt{coldef\_strategy}',
    }
);
```

Website	URL
CPAN	http://www.cpan.org
Amazon	http://www.amazon.com

Table 17: `continued` (continued)

2.11 Continued Tables

As alternative to multi-page tables, we can also split tables. The `continued` option then decrements the table counter and adds the `continuedmsg` (default is '(continued)') to the caption. See Table 17. That even works with `xtab` tables.

```
$table = LaTeX::Table->new(
    {   header  => [ [ 'Website', 'URL' ] ],
        data    => [
            [ 'CPAN',   'http://www.cpan.org'  ],
            [ 'Amazon', 'http://www.amazon.com' ],
        ],
        coldef_strategy => {
            URL     => qr{ \A \s* http }xms,
            URL_COL => '>{\ttfamily}l',
        },
        continued => 1,
        label     => 'tbl:continued',
        caption   => '\texttt{continued}',
    }
);
```

2.12 Ctable Package

The ctable package makes it easy to add footnotes. See Table 17.

```
$table->set_type('ctable');
$table->set_foottable('\tnote{footnotes are placed under the table}');
```

2.13 Multicols

In a twocolumn or multicols document, we use this starred version for Table 18:

Website	URL
Slashdot[a]	`http://www.slashdot.org`
Perlmonks	`http://www.perlmonks.org`
Google	`http://www.google.com`

[a] footnotes are placed under the table

Table 17: `coldef_strategy, type=ctable, foottable, continued.` (continued)

```
$table->set_star(1);
```

bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla

bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla

bla bla

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bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla

bla bla

bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla

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Website	URL
Slashdot[a]	`http://www.slashdot.org`
Perlmonks	`http://www.perlmonks.org`
Google	`http://www.google.com`

[a] footnotes are placed under the table

Table 18: `coldef strategy, type=ctable, foottable, star`.

bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla

bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla

bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla

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bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla

bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla

3 Customize **LaTeX::Table**

This module tries hard to produce perfect results with as less provided options as possible. However, typesetting tables is a complex topic and therefore almost everything in LaTeX::Table is configurable.

3.1 Custom Themes

Table 19 displays our example table with the *NYC* theme, which is meant for presentations (with LaTeX Beamer for example). You can change the theme by copying it, changing it and then storing it in `custom themes` (Table 20). You can also add the theme to the

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Item		
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 19: `custom_themes`, Example 1

Item		
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 20: `custom_themes`, Example 2

predfined themes by creating a themes module. See LaTeX::Table::Themes::ThemeI how to do that.

```
my $nyc_theme = $table->get_available_themes->{'NYC'};
$nyc_theme->{'DEFINE_COLORS'}      =
          '\definecolor{latextablegreen}{RGB}{93,127,114}';
$nyc_theme->{'HEADER_BG_COLOR'}    = 'latextablegreen';
$nyc_theme->{'DATA_BG_COLOR_ODD'}  = 'latextablegreen!25';
$nyc_theme->{'DATA_BG_COLOR_EVEN'} = 'latextablegreen!10';

$table->set_custom_themes({ CENTRALPARK => $nyc_theme });
$table->set_theme('CENTRALPARK');
```

3.2   Custom Templates

LaTeX::Table ships with some very flexible and powerful templates. Templates are a convenient way of generating the LaTeX code out of the user options and data. Internally, the Template Toolkit available from CPAN is used. It is possible to change the standard templates (each table `type` has its own template) with the `custom_template` option. For example, the LaTeX styles of some scientific journals provide their own table commands, here the one from the Bioinformatics journal:

```
\begin{table}[!t]
\processtable{This is table caption\label{Tab:01}}
{\begin{tabular}{llll}
\toprule
head1 & head2 & head3 & head4 \\
\midrule
row1 & row1 & row1 & row1 \\
row2 & row2 & row2 & row2 \\
row3 & row3 & row3 & row3 \\
row4 & row4 & row4 & row4 \\
\botrule
\end{tabular}}{This is a footnote}
\end{table}
```

A very basic template for this would be:

```
[% IF ENVIRONMENT %]
\begin{[% ENVIRONMENT %][% IF STAR %]*[% END %]}[% IF POSITION %][[% POSITION %]]
[% END %][% END %]
\processtable{[% IF CAPTION %][% CAPTION %][% END %][% IF LABEL %]\label{[% LABEL %]}[% END %]}
{\begin{[% TABULAR_ENVIRONMENT %]}{[% COLDEF %]}
[% HEADER_CODE %][% DATA_CODE %]\end{[% TABULAR_ENVIRONMENT %]}}{[% FOOTTABLE %]}
[% IF ENVIRONMENT %]\end{table}[% END %]
```

Now we have to define a the theme that is responsible for the rules (see 3.1):

```
  'Oxford' => {
      'STUB_ALIGN'        => q{l},
      'VERTICAL_RULES'    => [ 0, 0, 0 ],
      'HORIZONTAL_RULES'  => [ 1, 1, 0 ],
      'RULES_CMD' => [ '\toprule', '\midrule', '\midrule', '\botrule' ],
  }
```

Finally we can typeset tables for the Bioinformatics journal:

```
$table = LaTeX::Table->new(
    {
        caption          => 'This is table caption',
        label            => 'Tab:01',
        foottable        => 'This is a footnote',
        position         => '!t',
        header           => $test_header,
        data             => $test_data,
        theme            => 'Oxford',
```

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```
        custom_template   => $custom_template,
    }
);
```

If you think your custom template might be useful for others, please contribute it!

4   Version

Generated with LaTeX::Table Version 0.9.13

A   Header/Data

A.1   Simpsons Table

```
my $header = [ [ 'Character', 'Fullname', 'Voice' ], ];
my $data = [
    [ 'Homer',  'Homer Jay Simpson',       'Dan Castellaneta'  ],
    [ 'Marge',  'Marjorie Simpson',        'Julie Kavner'      ],
    [ 'Bart',   'Bartholomew Jojo Simpson', 'Nancy Cartwright'  ],
    [ 'Lisa',   'Elizabeth Marie Simpson', 'Yeardley Smith'    ],
    [ 'Maggie', 'Margaret Simpson',
        'Elizabeth Taylor, Nancy Cartwright, James Earl Jones,'
     . 'Yeardley Smith, Harry Shearer'                         ],
];
```

A.2   Animal Table

```
my $header = [
    [ 'Item:2c', '' ],
    [ '\cmidrule(r){1-2}'],
    [ 'Animal', 'Description',  'Price' ]
];

my $data = [
    [ 'Gnat',      'per gram', '13.651' ],
    [ '',          'each',      '0.012' ],
    [ 'Gnu',       'stuffed',  '92.59'  ],
    [ 'Emu',       'stuffed',  '33.33'  ],
    [ 'Armadillo', 'frozen',    '8.99'  ],
];
```

B   Themes

B.1   Type std

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 21: `theme=Berlin, type=std.`

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 22: `theme=Dresden, type=std.`

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 23: `theme=Houston, type=std.`

Item		
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 24: `theme=Meyrin, type=std.`

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 25: `theme=Miami, type=std.`

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 26: `theme=Muenchen, type=std.`

Item		
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 27: `theme=NYC, type=std.`

Item		
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 28: `theme=NYC2, type=std.`

Item		
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 29: `theme=NYC3, type=std`.

Item		
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 30: `theme=NYC4, type=std`.

Item		
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 31: `theme=Paris, type=std`.

Item		
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 32: `theme=Redmond, type=std`.

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 33: `theme=Redmond2, type=std.`

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 34: `theme=Zurich, type=std.`

Item		
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 35: `theme=plain, type=std.`

B.2 Type ctable

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 36: `theme=Berlin, type=ctable.`

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 37: `theme=Dresden, type=ctable.`

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 38: `theme=Houston, type=ctable.`

Item		
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 39: `theme=Meyrin, type=ctable.`

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 40: `theme=Miami, type=ctable.`

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 41: `theme=Muenchen, type=ctable.`

Item		
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 42: `theme=NYC, type=ctable`.

Item		
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 43: `theme=NYC2, type=ctable`.

Item		
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 44: `theme=NYC3, type=ctable`.

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 45: `theme=NYC4, type=ctable`.

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 46: `theme=Paris, type=ctable`.

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 47: `theme=Redmond, type=ctable`.

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 48: `theme=Redmond2,` `type=ctable.`

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 49: `theme=Zurich,` `type=ctable.`

Item		
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 50: `theme=plain,` `type=ctable.`

B.3 Type xtab

Table 51: `theme=Berlin, type=xtab.`

Item		Price
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Continued on next page		

Table 51: Continued from previous page

| Item | | Price |
Animal	Description	
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 52: `theme=Dresden, type=xtab.`

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Continued on next page		

Table 52: Continued from previous page

| Item | | |
Animal	Description	Price
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 53: `theme=Houston, type=xtab.`

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
Continued on next page		

Table 53: Continued from previous page

| Item | | Price |
Animal	Description	Price
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 54: `theme=Meyrin, type=xtab`.

Item		Price
Animal	Description	
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Continued on next page		

Table 54: Continued from previous page

Item		
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 55: `theme=Miami, type=xtab.`

	Item	
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01

Continued on next page

Table 55: Continued from previous page

| | Item | |
Animal	Description	Price
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 56: theme=Muenchen, type=xtab.

	Item	
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01

Table 56: Continued from previous page

Animal	Item Description	Price
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 57: `theme=NYC, type=xtab`.

| Item | | |
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Continued on next page		

Table 57: Continued from previous page

Item		
Animal	Description	Price
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 58: `theme=NYC2, type=xtab.`

| | Item | |
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Continued on next page		

Table 58: Continued from previous page

Item		
Animal	Description	Price
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 59: `theme=NYC3, type=xtab`.

| Item | | Price |
Animal	Description	
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65

Continued on next page

Table 59: Continued from previous page

Item		
Animal	Description	Price
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 60: `theme=NYC4, type=xtab`.

Item		
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Continued on next page		

Table 60: Continued from previous page

Item		
Animal	Description	Price
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 61: `theme=Paris, type=xtab.`

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Continued on next page		

Table 61: Continued from previous page

Item		Price
Animal	**Description**	
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 62: `theme=Redmond, type=xtab.`

Animal	Item Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01

Table 62: Continued from previous page

Item		
Animal	**Description**	**Price**
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 63: `theme=Redmond2, type=xtab`.

Animal	Item Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01

Table 63: Continued from previous page

| Item | | |
Animal	Description	Price
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 64: `theme=Zurich, type=xtab`.

Item		
Animal	**Description**	**Price**
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Continued on next page		

Table 64: Continued from previous page

Item		Price
Animal	**Description**	
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99

Table 65: `theme=plain, type=xtab`.

Item		
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99
Gnat	per gram	13.65
	each	0.01

Continued on next page

Table 65: Continued from previous page

Item		
Animal	Description	Price
Gnu	stuffed	92.59
Emu	stuffed	33.33
Armadillo	frozen	8.99