

## Exercise 5.14 — Tables (array package)

### 1) Start from the simple table example

Animal	Food	Size
dog	meat	medium
horse	hay	large
frog	flies	small

### 2) Try different alignments using l, c, and r

	Animal	Food	Size
Left/Left/Left:	dog	meat	medium
	horse	hay	large
	frog	flies	small
	Animal	Food	Size
Center/Center/Center:	dog	meat	medium
	horse	hay	large
	frog	flies	small
	Animal	Food	Size
Right/Right/Right:	dog	meat	medium
	horse	hay	large
	frog	flies	small

### 3) What happens if you have too few items in a table row?

If a row provides fewer cells than the preamble declares (here 3 columns), the missing cells are left empty.

Animal	Food	Size
dog	meat	medium
horse	hay	
frog	flies	small

### 4) What happens if you have too many items in a table row?

If a row provides more cells than declared, LaTeX produces an error (commonly “*Extra alignment tab has been changed to |cr*”). The following code would **not** compile if used as-is:

```
\begin{tabular}{lll}
Animal & Food & Size \\
dog    & meat & medium & EXTRA \\ % too many cells (4 instead of 3)
horse  & hay  & large \\
\end{tabular}
```

To fix it, either remove the extra cell, or declare 4 columns in the preamble.

## 5) Experiment with `\multicolumn` (spanning across columns)

### 5.1) Merge 2 cells horizontally

Animal	Food	Size
dog	meat	medium
frog	flies	small
fuath		unknown

### 5.2) Override formatting in a single cell using `\multicolumn{1}{...}{...}`

Here the first column is italic and adds a colon after each entry, but the header cell is kept normal by using `\multicolumn`.

Animal	Food	Size
<i>dog:</i>	meat	medium
<i>horse:</i>	hay	large
<i>frog:</i>	flies	small